



**Economics Research Associates**

Project Report

**SPA Fiscal Impact Analysis Framework**

Submitted to

**The City of Chula Vista**

Submitted by

**Economics Research Associates**

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**ERA Project No. 16039**

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## Memorandum

**Date:** February 12, 2008

**To:** Edward Van Eenoo, City of Chula Vista  
Mike Arthur, City of Chula Vista

**From:** Amitabh Barthakur, ERA

**RE:** SPA Fiscal Analysis –Fiscal Model Methodology Including the  
Development of Fiscal Factors in the Analysis of SPA Proposals

**CC:** ERA No. 16039

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### Introduction

Economics Research Associates (ERA) was retained by the City of Chula Vista (City) to prepare a fiscal impact analysis framework to analyze the fiscal impacts related to Specific Plan Areas (SPA). This memorandum report presents a summary of the analysis methodology developed by ERA using an existing SPA plan as an illustrative case.

Continuing on the base fiscal model created by ERA as a tool used during the General Plan Update (GPU) process, ERA has developed an analysis framework applicable to SPA plans for consistent evaluation of SPA proposals. It is important to note that this be viewed as a generic ‘analysis framework’ which serves as a guide to conducting fiscal impact analysis of SPAs. Specific fiscal analyses may call for additional adjustments and customization to best reflect the nuances of each unique SPA or project. This analysis framework, however, provides a consistent approach combining:

- a) Land use variables – use, density, population, employment
- b) Market variables – real estate values and market competitiveness
- c) The City’s current cost and revenue patterns – net city costs and discretionary revenues

This report presents the analysis methodology and approach using an existing SPA proposal as an illustrative case. The following sections provide a summary of the modeling steps and the derived results.

### Basic Modeling Methodology

This analysis framework is designed to analyze SPA level impacts to the City’s operating budget, i.e. the General Fund only. The following subsections will illustrate the broad

modeling methodology, basic assumptions, and unique steps applied to the overall fiscal analysis.

## **Expenditure Calculation**

With direction from the City's Office of Budget and Analysis (OBA) staff, ERA first determined departmental 'Net City Cost' for each City department that is included in the City's General Fund budget. This is given by the total departmental expenditure less cost coverage from program revenues and citywide overhead allocations. The 'Net City Cost' is the total expenditure for each department (and the total for the City as a whole) that needs to be covered by the discretionary revenue sources from the City's General Fund.

ERA with the help of City Staff then delineated this net expenditure into two categories – Fixed and Variable expenditures. Fixed expenditures are residual costs that are unlikely to be affected by any change in the City's physical development (in terms of population, dwelling units, employment etc.). Variable costs are expenditures that will be dependent on new development. Variable costs are further divided into direct and indirect costs. Direct costs are expenditures incurred in providing city services to the public, while indirect costs are functional expenditures incurred internally by City departments.

Based on ERA's understanding of the City's cost structure and interviews with staff from each department, ERA then determined the basis of allocating departmental variable costs on a citywide basis. This step also involves the identification of an appropriate variable development unit (of incremental development) that these costs may depend upon, e.g. land area by use, population, dwelling units, density or any other unit.

Using existing development data by land use as well as current demographic information, ERA then developed factors for each expenditure item that corresponds to the variable development unit identified. This is perhaps the key step in analyzing fiscal implications of land use, as it is in this step that one translates physical development into fiscal costs. Note that these factors take into account marginal costs due to economies of scale wherever applicable.

Finally, we apply these factors to the incremental land uses as specified under the proposed SPA plans to determine the incremental annual fiscal cost to the City resulting from new development. Note that this is the portion of variable 'Net City Cost' that needs to be covered by the City's discretionary General Fund Revenues. ERA assumes that cost coverage ratios of departmental revenue generating programs will maintain current levels. This analysis does not include expenditures related to capital programs.

## **Revenue Calculation**

As discussed above, the end result of the expenditure calculation is the 'Net Cost' that needs to be balanced by the General Fund Discretionary Revenues. Hence, the primary objective of the revenue calculation component is to determine the annual discretionary revenue generated from incremental development to the City's General Fund.

We calculate the market dependent discretionary tax revenues, such as sales taxes, property taxes, property transfer taxes, Vehicle License Fees (property tax backfill), transient

occupancy taxes (if applicable). through special models developed for that purpose. These models take into account potential future market conditions, the City's competitive position, pace of absorption of incremental development and a number of other relevant issues such as Proposition-13 implications and redevelopment.

For other revenues, ERA determined appropriate variable development units and developed incremental revenue factors based on existing development patterns and the existing level of revenue generation. The net result of these steps give the total annual operational revenue generated by new development.

A comparison of expenditures and revenues calculated as described above gives the net fiscal impact to the City's General Fund from a new SPA plan.

### **Modeling Steps**

The following sections include an illustration of the of the SPA fiscal impact modeling steps which are as follows:

Step 1 – Create a project absorption matrix by land use type (acres), dwelling units, population and employment.

Step 2- Derive annual fiscal costs using the incremental per unit cost factors developed by ERA

Step 3 – Derive public safety costs with density coefficient adjustments

Step 4- Derive annual fiscal costs as a summation of Step 2 and Step 3

Step 5 – Create an assessed valuation absorption matrix for the project using ERA's AV calculation methodology or project specific assumptions

Step 6 – Use special revenue models (as illustrated by ERA) to calculate

1. Property Taxes
2. Property Transfer Taxes
3. Vehicle license fees (VLF) and Motor vehicle in lieu fees (MVLF)
4. Sales taxes
5. Transient occupancy taxes

Step 7 – Derive other revenues by using the revenue matrix created by ERA

Step 8 – Derive annual fiscal revenues as a summation of Step 6 and Step 7

Step 9 – Derive net fiscal impacts as a difference between Step 8 and Step 4 results

### **Illustrative Fiscal Model**

The analytical framework is reliant upon two key sets of data that need to be periodically updated to keep the model 'current'. The first of these is the City's land use inventory –

the fiscal factors are in the context of current developed land in the City of Chula Vista. The second is the City's budget. In the illustrative case ERA has used the City's FY 2006 budget and the corresponding land use data from July 2006. Although one can continue to use these factors with inflation adjustments for future years, a periodic update of the budget data and corresponding developed land use data will account for shifts in fiscal policy as well as development patterns.

### ***Base Land Use, Dwelling Unit, and Population Inventory***

In order to develop base fiscal factors, ERA first examined the total inventory of land in the City by General Plan land use designations. Having gone through a process of land use data aggregation by use type, ERA was provided a consolidated database for developed land uses and dwelling units in the City by the Planning and Building Department. This information is presented in Table 1.

ERA first applied a vacancy factor to the total number of dwelling units based on DOF estimates to derive total occupied dwelling units or 'households'. ERA then utilized household size factors for each dwelling unit type, based on Census 2000 data for Chula Vista, to derive total household population in the City. In addition to this ERA applied a 'non-household' population factor based on DOF estimates to account for institutional and non-household residents in the City in order to derive total population estimates. Based on this approach the total existing population is estimated to be 220,036 persons.

**Table 1 – Chula Vista: Existing Developed Land Use Distribution (July 2006)**

<b>LAND USE</b>	<b>Total</b>
<b>Non Residential Uses</b>	
Retail (acres) <sup>1</sup>	963.8
Office (acres)	214.1
Hotel (acres) <sup>2</sup>	28.8
General Industrial (acres)	127.5
Research/Limited Industrial (acres)	740.0
Parks (acres) <sup>3</sup>	501.3
Public/Quasi Public (acres)	1,181.9
Open Space/ROWs/Other (acres) <sup>4</sup>	5,390.4
Special Land Uses	
Conference Center	-
Waterpark and Amphitheatre	66.0
Golf Courses <sup>5</sup>	692.6
University	-
Power Plant	75.2
<b>Residential Uses</b>	
Acreage <sup>6</sup>	
Single Family	7,366.6
Multi Family	1,689.2
Mobile Homes	320.1
<b>Total Acres</b>	<b>19,357.6</b>
Units	
Single Family	40,973
Multi Family	31,658
Mobile Homes	3,673
<b>Total Units</b>	<b>76,304</b>

(1) Includes retail land under visitor commercial and resort related uses

(2) Includes Hotels and Motels only

(including hotel/motel components of resort facilities)

(3) Includes both public and private parks

(4) Includes Open Space & Agriculture designated areas,  
rights of way, easements and other misc. undevelopable areas

(5) Includes both public and private golf courses

(6) Includes net developed residential acres only and excludes land area  
occupied by non-conforming uses, parks, and public facilities in residential areas

Source: City of Chula Vista and Economics Research Associates

**Table 2 – Chula Vista: Existing Population Estimates (July 2006)**

	<b>Total</b>
<u>Dwelling Units (DU s)<sup>1</sup></u>	
Single Family Units	40,973
Multi-Family Units	31,658
Moblie Homes	3,673
Total Dwelling Units	76,304
<u>Occupied DU s<sup>2</sup> (Households)</u>	
Single Family Units	39,740
Multi-Family Units	30,705
Moblie Homes	3,562
Total Occupied Units	74,007
<u>Estimated Persons per Household (Occupied DU)<sup>3</sup></u>	
Single Family Units	3.33
Multi-Family Units	2.58
Moblie Homes	1.99
<u>Estimated Existing HH Population</u>	
Single Family Units	132,148
Multi-Family Units	79,334
Moblie Homes	7,087
Total Estimated HH Population	218,569
Estimated Non HH Population <sup>4</sup>	1,467
<b>Total Estimated Existing Population</b>	<b>220,036</b>

<sup>1</sup>Existing dwelling unit inventory from Table 1

<sup>2</sup>Applying average vacancy rate of 3.01% as reported by the California Department of Finance

<sup>3</sup>Based on Census 2000 Housing Occupancy data for Chula Vista (does not include Boat, RV, Van occupants)

It is assumed that 'Single Family' includes both attached and detached units

<sup>4</sup>Applying California State Department of Finance Estimates

Source: City of Chula Vista, US Census 2000, California Dept. of Finance, and Economics Research Associates

### ***Project Absorption Estimates (Analysis Inputs)***

ERA suggests the creation of one consolidated absorption table for the SPA plan to be analyzed. This table provides absorption of the project in terms of:

- i) Land use types (as per Table 1)
- ii) Residential units by type
- iii) Incremental population growth
- iv) Incremental employment growth

Table 3 presents an absorption summary of the illustrative case study. ERA has estimated population growth by applying population per household factors based on citywide Census 2000 data. ERA suggests the use of Census or DOF data for developing household size factors .

**Table 3 – Project Absorption (Otay Ranch Villages 2, 3 and a Portion of Village 4)**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
<b>Non Residential Uses</b>															
Retail (acres)			7	14	20	20	20	20	20	20	20	20	20	20	20
Research/Limited Industrial (acres)	20	40	60	80	100	120	140	160	180	200	220	240	260	264	264
Parks (acres)	9	18	27	36	45	55	60	60	60	60	60	60	60	60	60
<b>Residential Uses</b>															
Units															
Single Family	150	300	450	600	750	900	986	986	986	986	986	986	986	986	986
Multi Family	275	550	825	1,100	1,375	1,650	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Mobile Homes															
<b>Total Units</b>	425	850	1,275	1,700	2,125	2,550	2,786	2,786	2,786	2,786	2,786	2,786	2,786	2,786	2,786
<b>Population</b>															
Single Family Persons/DU@	3.33	499	998	1,496	1,995	2,494	2,993	3,279	3,279	3,279	3,279	3,279	3,279	3,279	3,279
Multi Family Persons/DU@	2.58	711	1,421	2,132	2,842	3,553	4,263	4,651	4,651	4,651	4,651	4,651	4,651	4,651	4,651
Mobile Homes															
<b>Cumulative Population</b>	1,209	2,419	3,628	4,837	6,047	7,256	7,930	7,930	7,930	7,930	7,930	7,930	7,930	7,930	7,930
<b>Employment</b>															
Retail Emp/Acre @	19.08	-	-	134	267	382	382	382	382	382	382	382	382	382	382
Research/Limited Ind. Emp/Acre @	20.44	409	818	1,227	1,636	2,044	2,453	2,862	3,271	3,680	4,089	4,498	4,907	5,315	5,397
<b>Cumulative Employment</b>	409	818	1,360	1,903	2,426	2,835	3,244	3,653	4,062	4,470	4,879	5,288	5,697	5,779	5,779

Source: Otay Ranch Villages 2, 3 and 4 (Partial) PFFP; Economics Research Associates



Applying employment density factors calculated by ERA as shown in Table 4 derives employment absorption. Employment densities in terms of employees per acre are derived for each employment generating land use.

To calculate employment factors for retail, office and industrial uses we have used floor area ratio (FAR) estimates for each land use type to determine approximate building area per acre. This is then adjusted to reflect occupied gross leasable area (GLA) per acre assuming appropriate building efficiency and occupancy factors. Finally, applying occupied GLA per employee standards to the occupied GLA gives an employee per acre factor. Note that both FAR and occupied GLA per employee are based on prevailing standards in the region. We have assumed a fairly low employment density for Public-Quasi Public use due to the likely inclusion of open areas such as yards, storage areas etc. The model does not include any home-based employment.

**Table 4 – Employment Density Factors**

Land Uses	FAR <sup>1</sup> Estimate	Units/Acre	Employment Factor	Bldg. Efficiency	Occupancy	Occupied Units	Emp./Acre
Retail	0.28	12,197 s.f.	450 s.f./Empl.	80%	88%	8,587 s.f.	19.1
Office	0.56	24,394 s.f.	250 s.f./Empl.	80%	88%	17,173 s.f.	68.7
Hotel	0.30	13,068 s.f.	600 s.f./Empl.	80%	70%	7,318 s.f.	12.2
General Industrial	0.38	16,553 s.f.	1,000 s.f./Empl.	90%	88%	13,110 s.f.	13.1
Research/Limited Industrial	0.40	17,424 s.f.	600 s.f./Empl.	80%	88%	12,266 s.f.	20.4
Public/Quasi Public <sup>2</sup>	-	-	-	-	-	-	2.0

<sup>1</sup>FAR is Floor Area Ratio defined as the ratio of land area to building floor area (this is a measure of building density)

<sup>2</sup>ERA estimates

Note: The above estimates do not include jobs at home and any other informal sector employment

Source: Economics Research Associates

## ***Expenditure Estimates***

### **Cost Allocation**

As discussed in the previous sections, ERA's calculation of net operating expenditures by department is presented in Table 5. This analysis uses the City's FY 2006 adopted budget to derive all cost factors. All operating expense items are distributed by 'Org Keys' as defined in the City Budget. As seen in the table, annual departmental operating expenses are adjusted for overhead allocation and program revenues to give net costs that need to be compensated by the City's discretionary revenues. ERA has worked closely with Budget and Analysis staff to allocate all departmental overheads and program revenues.

The Net Costs (to be covered by discretionary revenues) are distributed into 'Fixed' and 'Variable' categories. Further, Variable costs are divided into two components – Service costs, which are direct costs, related to providing City services and Functional costs, which are indirect costs, related to City operations. Capital Improvement expenditures are shown separately.

Table 5 - Chula Vista: Net City Cost Distribution by Department (Based on the FY 2006 Adopted Budget)

Department	Operating Expenses Adopted 2006	Allocated Citywide Overhead	Program Revenues	Net City Costs (Discretionary Funds)	NET CITY COSTS DISTRIBUTION ESTIMATES			
					Fixed Costs	Variable Costs		
					Service Costs (Direct)	Functional Costs (Indirect)		
LEGISLATIVE AND ADMINISTRATION								
City Council								
	Subtotal	\$1,454,173	(\$393,012)	(\$56,824)	\$1,004,337	\$431,865	\$0	\$572,472
Boards and Commissions								
	Subtotal	\$10,163	(\$10,163)	\$0	\$0	\$0	\$0	\$0
City Clerk								
Operations	1,040,647	(513,300)	(132,701)	394,646	193,377	-	-	201,270
Elections	81,109	(44,844)	-	36,265	17,770	-	-	18,495
	Subtotal	\$1,121,756	(558,144)	(132,701)	\$430,911	\$211,146	\$0	\$219,765
City Attorney								
Operations	1,774,304	(877,284)	(779,141)	117,879	-	-	-	117,879
Litigation	785,641	(76,286)	(153,102)	556,253	-	-	-	556,253
	Subtotal	\$2,559,945	(\$953,570)	(\$932,243)	\$674,132	\$0	\$0	\$674,132
Administration								
Administration	1,003,220	(850,607)	(63,389)	89,224	65,133	-	-	24,090
Legislative	-	-	-	-	-	-	-	-
Public Information	925,176	(637,226)	(173,797)	114,153	83,331	30,821	-	-
Organizational Development & Training	-	-	-	-	-	-	-	-
Budget & Analysis	1,075,826	(883,641)	(290,036)	-	-	-	-	-
Special Operations	392,033	(774,268)	-	-	-	-	-	-
	Subtotal	\$3,396,255	(\$3,145,743)	(\$527,222)	203,376	\$148,465	\$30,821	\$24,090
Management and Information Services								
Operations	2,558,849	(2,054,542)	(261,544)	242,763	29,132	-	-	213,631
GIS	679,924	(545,922)	(76,113)	57,889	6,947	-	-	50,942
Disaster Preparedness	116,517	(93,553)	-	22,964	2,756	-	-	20,208
Maintenance	628,769	(504,849)	-	123,920	-	-	-	123,920
	Subtotal	\$3,984,059	(\$3,198,867)	(\$337,657)	447,535	\$38,834	\$0	\$408,702
Human Resources								
Administration	282,774	(294,955)	-	-	-	-	-	-
Personnel Services	1,424,864	(1,486,245)	-	-	-	-	-	-
Employee Development	573,485	(847,151)	-	-	-	-	-	-
Risk Management	2,932,254	(3,058,570)	(473,568)	-	-	-	-	-
Volunteer Services	19,510	(20,350)	-	-	-	-	-	-
	Subtotal	\$5,232,887	(\$5,707,272)	(\$473,568)	-	\$0	\$0	\$0
Finance								
Administration	454,752	(394,158)	(117,797)	-	-	-	-	-
Operations	1,121,159	(1,026,643)	(503,442)	-	-	-	-	-
Treasury	663,710	(552,985)	(673,773)	-	-	-	-	-
Purchasing	570,751	(642,368)	(500)	-	-	-	-	-
	Subtotal	\$2,810,372	(\$2,616,155)	(\$1,295,512)	-	\$0	\$0	\$0
General Services								
	Subtotal	\$10,161,925	\$898,535	(\$5,576,356)	\$5,484,104	\$219,364	\$0	\$5,264,740
TOTAL LEGISL. & ADMIN. SERVICES		\$30,731,535	(\$15,684,390)	(\$9,332,083)	8,244,396	\$1,049,674	\$30,821	\$7,163,901

Department	Operating Expenses Adopted 2006	Allocated Citywide Overhead	Program Revenues	Net City Costs (Discretionary Funds)	NET CITY COSTS DISTRIBUTION ESTIMATES		
					Fixed Costs	Variable Costs	
						Service Costs (Direct)	Functional Costs (Indirect)
<b>DEVELOPMENT AND MAINTENANCE SERVICES</b>							
<b>Community Development</b>							
Administration	965,502	28,033	(290,005)	703,530	478,400	-	225,130
Redevelopment	809,672	284,650	(2,034,967)	-	-	-	-
Housing/CDBG	354,676	233,166	(732,041)	-	-	-	-
Special Projects	-	-	-	-	-	-	-
Economic Development	1,175,496	227,392	(172,250)	1,230,638	-	1,230,638	-
Environmental Services	531,270	171,898	-	703,168	-	703,168	-
Subtotal	\$3,836,616	\$945,138	(\$3,229,263)	2,637,335	\$478,400	\$1,933,805	\$225,130
<b>Planning and Building Services</b>							
General Administration	637,931	-	-	637,931	357,241	-	280,690
Planning Services				-	-	-	-
Planning Administration	554,551	-	(251,755)	302,796	236,181	-	66,615
Planning Commission	13,806	-	-	13,806	-	-	13,806
Grants	414,325	-	(414,325)	-	-	-	-
Current Planning	3,198,287	1,088,112	(4,393,565)	-	-	-	-
Advanced Planning	1,095,603	399,537	(249,733)	1,245,407	-	1,245,407	-
Subtotal Planning Services	5,276,572	1,487,649	(5,309,378)	1,562,009	236,181	1,245,407	80,421
Building Services							
Building Administration	459,492	-	(4,500)	454,992	368,544	-	86,448
Boards & Commissions	8,310	-	-	8,310	-	-	8,310
Permits & Licenses	3,437,343	925,636	(4,677,263)	-	-	-	-
Code Enforcement	917,092	136,755	(971,010)	82,837	-	82,837	-
Subtotal Building Services	4,822,237	1,062,392	(5,652,773)	546,139	368,544	82,837	94,758
Subtotal	\$10,736,740	\$2,550,041	(\$10,962,151)	2,746,079	\$961,966	\$1,328,244	455,869
<b>Engineering</b>							
Administration	753,378	1,680	(1,756,342)	-	-	-	-
Fiscal Services	272,848	-	(253,746)	19,102	19,102	-	-
Infrastructure Services	1,289,188	-	(1,955,457)	-	-	-	-
Development Services	2,025,955	413,043	(3,316,678)	-	-	-	-
Transportation Services	3,291,152	15,733	(604,631)	2,702,254	27,023	2,675,231	-
Subtotal	\$7,632,521	\$430,456	(\$7,886,854)	\$2,721,356	\$46,125	\$2,675,231	-
<b>Public Works Operations</b>							
Administration	270,548	16,122	(276,708)	9,962	9,962	-	-
Operations	17,156,545	1,112,736	(12,939,578)	5,329,703	79,946	5,249,757	-
Inspection Services	2,556,843	-	(2,338,539)	218,304	3,275	215,029	-
Subtotal	\$19,983,936	\$1,128,858	(\$15,554,825)	5,557,969	\$93,182	\$5,464,787	-
TOTAL DEVELOPMENT AND MAINTENANCE SERVICES	\$42,189,813	\$5,054,493	(\$37,633,093)	\$13,662,740	\$1,579,673	\$11,402,068	\$680,999
<b>PUBLIC SAFETY</b>							
<b>Police</b>							
Administration	229,267	-	(51,684)	177,583	177,583	-	-
Patrol	25,187,067	4,225,767	(3,075,233)	26,337,601	-	26,337,601	-
Investigations	7,401,235	1,360,233	(1,501,622)	7,259,846	-	7,259,846	-
Administrative Services	5,941,127	170,273	(1,147,052)	4,964,348	-	-	4,964,348
Special Operations	2,192,688	764,708	(413,222)	2,544,174	-	2,544,174	-
CA Border Alliance Group	1,573,171	-	(1,618,781)	-	-	-	-
Animal Control	-	-	-	-	-	-	-
Fiscal Operations/ Research & Evaluation	879,191	-	(21,283)	857,908	-	-	857,908
Subtotal	\$43,403,746	\$6,520,981	(\$7,828,877)	42,141,460	177,583	\$36,141,621	\$5,822,256

Department	Operating Expenses Adopted 2006	Allocated Citywide Overhead	Program Revenues	Net City Costs (Discretionary Funds)	NET CITY COSTS DISTRIBUTION ESTIMATES		
					Fixed Costs	Variable Costs	
						Service Costs (Direct)	Functional Costs (Indirect)
<b>Fire</b>							
Administration	1,075,146	-	(57,214)	1,017,932	793,987	223,945	-
HR Program	216,622	-	-	216,622	-	-	216,622
Training	734,985	-	-	734,985	-	-	734,985
Fire Volunteer Program	15,760	-	-	15,760	-	15,760	-
Emergency Management	171,804	-	(20,085)	151,719	-	151,719	-
Grants	495,267	-	(495,267)	-	-	-	-
Fire Suppression	14,969,109	1,394,597	(479,423)	15,884,283	-	15,884,283	-
Fire Communication	1,064,685	-	-	1,064,685	-	1,064,685	-
Fire Prevention	956,026	172,366	(380,050)	748,342	-	748,342	-
<b>Subtotal</b>	<b>\$19,699,404</b>	<b>\$1,566,963</b>	<b>(\$1,432,039)</b>	<b>19,834,328</b>	<b>\$793,987</b>	<b>\$18,088,734</b>	<b>951,607</b>
<b>TOTAL PUBLIC SAFETY</b>	<b>\$63,103,150</b>	<b>\$8,087,944</b>	<b>(\$9,260,916)</b>	<b>61,975,788</b>	<b>\$971,570</b>	<b>\$54,230,355</b>	<b>\$6,773,863</b>
<b>CULTURE AND LEISURE</b>							
<b>Recreation</b>							
Recreation Administration	1,027,808	596,461	(229,388)	1,394,881	599,799	-	795,082
Major Rec Ctr & Park Complexes	763,910	-	(397,275)	366,635	-	366,635	-
Swimming and Sports	1,468,893	1,043,085	(863,946)	1,648,032	-	1,648,032	-
Parks and Rec Commission	1,083	-	-	1,083	-	-	1,083
Senior and Youth Services	540,189	-	(95,382)	444,807	-	444,807	-
Recreation Facilities	2,007,958	-	(981,059)	1,026,899	-	1,026,899	-
Other Recreation Activities	76,240	-	(31,000)	45,240	-	45,240	-
<b>Subtotal</b>	<b>\$5,886,081</b>	<b>1,639,546</b>	<b>(2,598,050)</b>	<b>4,927,577</b>	<b>\$599,799</b>	<b>\$3,531,613</b>	<b>796,165</b>
<b>Library</b>							
Library Administration	71,051	171,407	(111,440)	131,018	26,204	-	104,814
Grants Development Services	143,962	-	-	143,962	-	-	143,962
Library Services	6,802,813	1,147,496	(601,211)	7,349,098	-	7,349,098	-
Cultural Arts & Community Outreach	649,246	46,214	(40,571)	654,889	-	654,889	-
Educational	1,979,602	298,599	(1,249,133)	1,029,068	-	1,029,068	-
<b>Subtotal</b>	<b>\$9,646,674</b>	<b>\$1,663,716</b>	<b>(\$2,002,355)</b>	<b>\$9,308,035</b>	<b>\$26,204</b>	<b>\$9,033,055</b>	<b>248,776</b>
<b>Nature Center</b>							
Operations less CIP	1,024,043	233,655	(141,185)	1,116,513	591,752	524,761	-
Grants	9,000	-	(15,000)	-	-	48,072	-
Bookstore	102,443	15,101	(69,472)	48,072	-	-	-
<b>Subtotal</b>	<b>\$1,135,486</b>	<b>\$248,756</b>	<b>(\$225,657)</b>	<b>\$1,164,585</b>	<b>\$591,752</b>	<b>\$572,833</b>	<b>\$0</b>
<b>TOTAL CULTURE AND LEISURE</b>	<b>\$16,668,241</b>	<b>\$3,552,018</b>	<b>(\$4,826,062)</b>	<b>\$15,400,197</b>	<b>\$1,217,754</b>	<b>\$13,137,501</b>	<b>\$1,044,942</b>
<b>NON-DEPARTMENTAL (Excluding Capital Improvements)</b>							
<b>Operations</b>							
<b>Subtotal</b>	<b>\$3,888,821</b>	<b>(\$1,010,065)</b>	<b>\$0</b>	<b>\$2,878,756</b>	<b>\$2,878,756</b>	<b>\$0</b>	<b>\$0</b>
<b>TOTAL NON-DEPARTMENTAL (Excluding CIP)</b>	<b>\$3,888,821</b>	<b>(\$1,010,065)</b>		<b>\$2,878,756</b>	<b>\$2,878,756</b>	<b>\$0</b>	<b>\$0</b>
<b>ALL EXPENDITURES OTHER THAN CIP</b>	<b>\$156,581,560</b>	<b>\$0</b>	<b>(\$61,052,154)</b>	<b>\$102,161,876</b>	<b>\$7,697,428</b>	<b>\$78,800,745</b>	<b>\$15,663,704</b>
<b>Capital Improvements (CIP)</b>	<b>\$65,000</b>						
<b>TOTAL EXPENDITURES</b>	<b>\$156,646,560</b>						

Source: Economics Research Associates and the City of Chula Vista

## **Development of Fiscal Cost Factors**

Adopted General Fund expenditures for FY 2006 is \$156,646,560. Of this \$65,000 is set aside for capital projects (General Fund related), leaving a total of \$156,581,560. Program revenues generate a total of \$61,052,154 and cover approximately 39 percent of total (non-capital) General Fund expenditures. Note, however, that program revenues are restricted for cost coverage of the particular programs that generate the revenues and usually cannot be moved around even within the General Fund. Total adjusted net costs are estimated to be \$102,161,876.

The City's budget shows three major cost centers – Public Safety, Development and Maintenance, and Culture and Leisure. Together, these three components account for close to 90 percent of net costs.

Variable costs are dependent on a number of factors related to incremental physical development in the City. ERA has delineated each variable cost item by its dependence on specific allocation variables (measure of growth). These allocations are consistent with the GPU fiscal model. ERA has adjusted functional costs by a marginal cost factor, which is given by the historic (3-year) ratio of departmental staff growth to population growth

With the exception of service costs related to Parks and Recreation, Public Works, Police and Fire departments, all other functional and service costs are allocated on the basis of appropriate units as described below.

### ***Service and Functional Cost Factors***

Service (direct) and functional (indirect) costs are allocated on the basis of land use distribution, population, or dwelling units. Appendix Tables A-1 and A-2 present ERA's detailed calculation of these cost factors. These allocations, however, are based on a number of key assumptions, which are as follows:

- i) In cases where service costs are distributed by more than one land use category, it is necessary to adjust the absolute share of land area to reflect more realistic service demand. For example, even though 25 percent of the current land inventory is designated as Open Space or Rights of Way, and 50 percent of the land inventory is attributed to residential, these shares do not reflect a direct relationship to the share of service costs. ERA used Equivalent Dwelling Units (EDU) share by land use type as a relative adjustment factor to account for this imbalance.
- ii) Functional costs are adjusted to reflect marginal growth and economies of scale of current staffing levels. ERA's marginal adjustment factor is given by the ratio of departmental staffing growth during a historic 3-year period to population growth during the same period. In certain cases the citywide marginal growth factor is applied in order to even out interdepartmental staffing gains and losses resulting from departmental shifts and changes.

### ***Public Safety Cost Factors***

Following the GPU fiscal analysis methodology, ERA has used calls for service as the primary basis for allocating the majority of Police and Fire service (direct) costs by land

use with certain adjustments. The City collected calls for service data for Police and Fire services for a full year. This information was then geo-coded and distributed by 4 aggregated General Plan Land Use categories in terms of their point of origin, namely, Commercial, Industrial, Residential, and Other. In order to reflect realistic costs in providing services, call volume data was converted to service time (in seconds) by for each land use.

ERA then separated departmental cost items by allocation method (calls for service basis or other). Costs that are allocated on a calls-for-service basis are then distributed by calls for service associated with the four broad land use categories. Contemporary operating costs allocated to a land use are divided by the total amount of developed acres or units under that particular use to arrive at a citywide cost per incremental unit of growth.

### ***Culture and Leisure Service Cost Factors***

ERA has calculated costs for providing culture and leisure services on a citywide basis using population as a measure of incremental growth. Culture and Leisure includes two primary functions –Recreation (includes parks) and Library. We have used the relative growth in publicly maintained parks acreage per capita from current conditions to buildout (per the GPU) as a growth factor for Recreation services. For Library services we have used the relative growth in library space per capita from current conditions to buildout as a growth factor.

Based on data provided by the City's Planning Department and corresponding population estimates by ERA, we derived the ratio of developed parks and recreation related acreage per 1,000 residents under current conditions and at General Plan buildout. This gives us the relative change in the Recreation Land Use Factor on a citywide basis. A positive change in the Land Use Factor reflects an increased level of service Citywide, while a negative change reflects a decreased level of service compared to current levels.

Applying the relative change in 'Land Use Factor' to the current per capita cost gives the incremental per capita cost of providing Recreation services at buildout on a citywide basis. Library costs per capita for incremental population was calculated in a similar manner using the change in library square footage per 1,000 residents as a use factor.

The detailed analysis is presented in Appendix Table A-3.

### ***Public Works Service Cost Factors***

Trip generation factors by land use category were used as a proxy to allocate costs for Public Works operating costs. ERA first derived trip generation rates for seven broad land use categories. These factors were benchmarked on regional traffic generation factors developed by SANDAG. Since SANDAG's factors are distributed across many sub-categories within these broad land uses, ERA used a method of weighted averages and staff consultation to derive the factors used in this analysis. It is important to note that these estimates provide a relative comparison of trip generation within this group of land uses and may not reflect actual numbers of trips generated within the City. Applying these estimates to the existing land use distribution in the City gives us total trips generated and the share of trips by land use. We used trip generation share as a proxy to allocate current

Public Works operating costs and derived cost factors per unit of incremental development. This methodology is illustrated in Appendix Table A-4.

## Summary of Cost Factors

A matrix summarizing all of the cost factors developed in this process is presented in Table 6. This matrix shows citywide cost factors relative to each City department and the variable measure of incremental growth. Note that this matrix does not include public safety costs related to residential uses, which will be incorporated in an additional step.

### ***Density Coefficient Adjustments for Public Safety Costs***

The cost per dwelling unit factors derived for each of the land uses reflect the existing economies of scale relative to existing development patterns. With oncoming development these factors will change. Public safety costs for residential uses are further refined to address the increasing diversity of residential mix and densities that are likely to be a part of future development in Chula Vista. :

Based on ERA's empirical research there is a strong positive correlation between residential density and calls for service. Dwelling unit density alone, however, is not the only driver of public service costs, the other sensitive variable is household size. We understand that there may be other qualitative variables, which affect public safety costs, but with respect to this analysis we feel that it is appropriate to use the above two variables as primary drivers.

To derive the combined effect of the above variables ERA uses a 'Density Coefficient' given by the following relationship:

$$\text{Residential Density Coefficient (R)} = [DU/Acre_{dR} * Persons/Occupied DU_{pR}]$$

Where

- i) *R is a defined geography (City or SPA)*
- ii) *DU = Dwelling Unit(s)*
- iii) *dR is the residential density for area R derived by dividing the total DUs by the acreage attributed to residential use within the area*
- iv) *pR is the weighted average persons per household for area R*

The density coefficient essentially combines two attributes of residential density – physical density of residential land use in terms of dwelling units per acre and the corresponding household density in terms of persons per household – expressing an overall 'persons per acre' factor for residential areas.

Based on 2006 data the City's existing Density Coefficient is 24.04 persons per acre. In order to calculate public safety costs from new development, we first calculate the achieved Density Coefficient of the project on an annual basis, and then determine its variance from the current average. This variance is used to adjust the current average

public safety costs per dwelling unit to derive the appropriate cost factor applicable to the project. This is presented in Table 7 with reference to the illustrative case study.

### **Total Fiscal Costs**

Total annual fiscal operating cost to the City resulting from incremental growth at buildout is given by the summation of the following

- i) Annual cost derived by applying the cost factors for each land use included in the expense matrix to the cumulative absorption of the project.
- ii) Public safety costs allocated to residential growth derived by applying Density Coefficient adjusted cost factors to cumulative residential growth.

Table 8 presents an expenditure summary for the illustrative case.

Although ERA has used the density coefficient adjustment for residential uses, in principle this methodology can be expanded to include non-residential uses as well. Unless there is a significant variation of densities from current averages or the project includes certain unique non-residential product types, this adjustment may not be necessary.



**Table 6 – Incremental per unit Cost Factors (Based on FY 2006 Adopted Budget)**

Citywide Cost Factors by Function/Department											
		Land Uses									
	Population (Per person)	Retail (Per Acre)	Office (Per Acre)	Hotel (Per Acre)	Industrial (Per Acre)	Parks (per acre)		Public Use (Per Acre)	Open Space (Per Acre)	Other (Per Acre)	Residential (Per DU)
						Private	Public				
<u>LEGISLATIVE AND ADMINISTRATION</u>											
City Council	\$1.87										
Boards and Commissions											
City Clerk	\$0.72										
City Attorney		\$37.30	\$40.28	\$23.84	\$9.84						\$ 5.64
Administration	\$0.08										\$ 0.40
Management and Information Services	\$1.33										
Human Resources											
Finance											
<u>DEVELOPMENT AND MAINTENANCE SERVICES</u>											
Community Development	\$0.82	\$906.12	\$978.61	\$579.20	\$239.01					\$8.32	\$ 8.00
Planning and Building Services	\$1.32	\$106.60	\$114.59	\$70.54	\$33.02					\$15.71	\$ 15.92
Engineering		\$1,245.44	\$659.35	\$293.05	\$124.54		\$76.91			\$76.91	\$ 13.92
Public Works		\$2,544.11	\$1,346.88	\$598.61	\$254.41		\$29.93	\$149.65		\$149.65	\$ 28.43
General Services	\$17.18										
<u>PUBLIC SAFETY</u>											
Police (Excluding Residential)	\$7.19	\$6,860.31	\$6,860.31	\$6,860.31	\$916.58		\$2,140.94	\$2,140.94		\$2,140.94	
Fire (Excluding Residential)	\$1.17	\$2,538.77	\$2,538.77	\$2,538.77	\$313.56	\$132.27	\$132.27	\$132.27	\$132.27	\$132.27	
<u>CULTURE AND LEISURE</u>											
Parks and Recreation	\$27.19										
Library	\$55.09										
Nature Center											\$ 7.51
Sub-Total Unit Cost	\$ 113.96	\$ 14,238.66	\$ 12,538.81	\$ 10,964.33	\$ 1,890.97	\$ 132.27	\$ 2,380.05	\$ 2,422.86	\$ 132.27	\$ 2,523.80	\$ 79.82

Source: Economics Research Associates

**Table 7 – Density Coefficient Adjustment for Public Safety Costs (Otay Ranch Villages 2, 3 and a Portion of Village 4)**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14
<b>Residential Uses</b>														
<b>Units</b>														
Single Family	150	300	450	600	750	900	986	986	986	986	986	986	986	986
Multi Family	275	550	825	1,100	1,375	1,650	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Mobile Homes														
<b>Total Units</b>	<b>425</b>	<b>850</b>	<b>1,275</b>	<b>1,700</b>	<b>2,125</b>	<b>2,550</b>	<b>2,786</b>	<b>2,786</b>	<b>2,786</b>	<b>2,786</b>	<b>2,786</b>	<b>2,786</b>	<b>2,786</b>	<b>2,786</b>
<b>Population</b>														
Single Family Persons/DU@	3.33	499	998	1,496	1,995	2,494	2,993	3,279	3,279	3,279	3,279	3,279	3,279	3,279
Multi Family Persons/DU@	2.58	711	1,421	2,132	2,842	3,553	4,263	4,651	4,651	4,651	4,651	4,651	4,651	4,651
Mobile Homes														
<b>Cumulative Population</b>	<b>1,209</b>	<b>2,419</b>	<b>3,628</b>	<b>4,837</b>	<b>6,047</b>	<b>7,256</b>	<b>7,930</b>	<b>7,930</b>	<b>7,930</b>	<b>7,930</b>	<b>7,930</b>	<b>7,930</b>	<b>7,930</b>	<b>7,930</b>
<b>Acres (TBD)</b>	<b>52</b>	<b>104</b>	<b>157</b>	<b>209</b>	<b>261</b>	<b>313</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>
<b>Project Density Coefficient (Persons/Acre)</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>	<b>23.16</b>
<b>Current Citywide Density Coefficient</b>	24.04 persons/acre													
<b>Density Coefficient Variation</b>	-3.7%	-3.7%	-3.7%	-3.7%	-3.7%	-3.7%	-3.6%	-3.6%	-3.6%	-3.6%	-3.6%	-3.6%	-3.6%	-3.6%
<b>Current Police Service Costs</b>	\$ 284.11	/ DU												
<b>Current Fire Service Costs</b>	\$ 176.70	/DU												
<b>Adjusted Public Safety Costs per Dwelling Unit</b>														
Police	\$ 273.73	\$ 273.73	\$ 273.73	\$ 273.73	\$ 273.73	\$ 273.73	\$ 273.80	\$ 273.80	\$ 273.80	\$ 273.80	\$ 273.80	\$ 273.80	\$ 273.80	\$ 273.80
Fire	\$ 170.25	\$ 170.25	\$ 170.25	\$ 170.25	\$ 170.25	\$ 170.25	\$ 170.29	\$ 170.29	\$ 170.29	\$ 170.29	\$ 170.29	\$ 170.29	\$ 170.29	\$ 170.29
<b>Annual Public Safety Costs (Allocated to DUs)</b>														
Police (\$000s)	116.34	232.67	349.01	465.35	581.68	698.02	762.82	762.82	762.82	762.82	762.82	762.82	762.82	762.82
Fire (\$000s)	72.36	144.71	217.07	289.42	361.78	434.14	474.43	474.43	474.43	474.43	474.43	474.43	474.43	474.43
<b>Total (\$000s)</b>	<b>\$ 188.69</b>	<b>\$ 377.39</b>	<b>\$ 566.08</b>	<b>\$ 754.77</b>	<b>\$ 943.46</b>	<b>\$ 1,132.16</b>	<b>\$ 1,237.25</b>	<b>\$ 1,237.25</b>	<b>\$ 1,237.25</b>	<b>\$ 1,237.25</b>	<b>\$ 1,237.25</b>	<b>\$ 1,237.25</b>	<b>\$ 1,237.25</b>	<b>\$ 1,237.25</b>

Note:

Project Residential Acreage is estimated by applying the current Citywide Average Density of 8.14 DU/Developed Acre

Source: Otay Ranch Villages 2, 3 and 4 (Partial) PFFP; Economics Research Associates

**Table 8 – Annual Fiscal Cost Summary in 2006 Dollars (Otay Ranch Villages 2, 3 and a Portion of Village 4)**

<b>Expense Drivers</b>	<b>Unit Cost</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>	<b>Year 7</b>	<b>Year 8</b>	<b>Year 9</b>	<b>Year 10</b>	<b>Year 11</b>	<b>Year 12</b>	<b>Year 13</b>	<b>Year 14</b>	<b>Year 15</b>
		(Expenses in \$000s)														
<i>Inflation Factor</i>	1%	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.12	1.13	1.14	1.15
Retail (acres)	\$ 14,239	\$ -	\$ -	\$ 102	\$ 205	\$ 296	\$ 299	\$ 302	\$ 305	\$ 308	\$ 311	\$ 315	\$ 318	\$ 321	\$ 324	\$ 327
Office (acres)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hotel (acres) <sup>2</sup>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General Industrial (acres)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Research/Limited Industrial (acres)	\$ 1,891	38	76	116	156	197	238	281	324	369	414	460	506	554	568	574
Parks (acres)	\$ 2,380	22	44	66	89	113	136	151	152	154	155	157	158	160	161	163
Dwelling Units	\$ 80	34	69	104	140	177	214	236	238	241	243	246	248	251	253	256
Population (Persons)	\$ 114	138	278	422	568	717	869	959	969	979	988	998	1,008	1,018	1,028	1,039
Public Safety Costs Allocated to DUs		189	381	577	778	982	1,190	1,313	1,326	1,340	1,353	1,367	1,380	1,394	1,408	1,422
		\$ 420	\$ 848	\$ 1,387	\$ 1,936	\$ 2,481	\$ 2,947	\$ 3,243	\$ 3,316	\$ 3,390	\$ 3,465	\$ 3,541	\$ 3,619	\$ 3,698	\$ 3,743	\$ 3,781

Source: Otay Ranch Villages 2, 3 and 4 (Partial) PFFP; Economics Research Associates

## ***Revenue Estimates***

Fiscal Revenues are calculated by bringing together a number of special models. The emphasis here is less on developing uniform factors and focusing more on tying market realities to the discretionary revenue generating sources of the City. ERA has used special models to calculate the revenue impacts from property taxes, sales taxes, Vehicle License Fees (VLF), and real property transfer taxes. Although the illustrative case does not have any lodging related uses, transient occupancy taxes should also be calculated separately on a project performance basis as applicable.

Property tax impacts are calculated by incorporating the actual anticipated increment in assessed valuation. We also account for the effects of Prop. 13 property tax increase limitations and average turnovers of property during the absorption period resulting in reassessments. ERA has assumed appropriate appreciation rates and turnover rates to determine real property transfer tax impacts.

Sales tax impacts are not derived from the sales performance of the on-site retail. Instead, ERA has modeled sales tax revenues by estimating the potential capture of retail sales in Chula Vista that will be generated by new households in the SPA development. This may include retail expenditures by new residents elsewhere in the City (other than just the on-site retail).

Vehicle License Fees are calculated to reflect recent state budget changes. ERA has estimated VLF allocation (based on reallocation of VLF collections at a reduced rate of 0.65% by the State) attributed to the SPA on per capita basis. The State has also committed to allocate additional property tax revenues to local jurisdictions to compensate for the reduced VLF allocations. As per the current Revenue and Taxation Code, this property tax in lieu of VLF is allocated on the basis of assessed valuation growth in the City.

## **Budgeted Revenues**

Table 9 presents the City's discretionary revenues as per the FY 2006 adopted budget. ERA has adjusted total revenues by excluding any program related revenues and then distributed the net amount into two broad categories – Fixed and Variable Revenues. Fixed revenues are unlikely to change with additional development, while variable revenues will change with new development in the City. As shown in the table, the City receives approximately \$94.93 million in discretionary revenues not including Capital Improvement Project transfers. Of this amount approximately \$5.04 million are fixed revenues, while the remaining \$89.88 million are variable revenues.

**Table 9 – City of Chula Vista: Discretionary Revenues (Based on the FY 2006 Budget)**

NON-DEPARTMENTAL REVENUE CATEGORIES	DISCRETIONARY REVENUES		PROGRAM REVENUES		NET REVENUES	REVENUE DISTRIBUTION	
	AB 2006		(Estimate)			Fixed Revenues	Variable Revenues
<u>Property Taxes</u>							
Current Taxes - Secured	\$	18,637,563	\$	-	\$ 18,637,563	\$ -	\$ 18,637,563
State Secured - Unitary		350,000		-	350,000	-	350,000
Current Taxes - Unsecured		840,000		-	840,000	-	840,000
Delinquent Taxes		206,000		-	206,000	-	206,000
Subtotal	\$	20,033,563		\$0	\$ 20,033,563	\$0	\$ 20,033,563
<u>Other Local Taxes</u>							
Sales and Use Taxes	\$	26,788,000	\$	-	\$ 26,788,000	\$ -	\$ 26,788,000
Franchise Fees		10,249,651		-	10,249,651	-	10,249,651
Utility Taxes		7,435,816		-	7,435,816	-	7,435,816
Business License Tax		1,169,456		-	1,169,456	-	1,169,456
Transient Occupancy Taxes		2,410,301		-	2,410,301	-	2,410,301
Real Property Transfer Tax		2,407,777		-	2,407,777	-	2,407,777
Subtotal	\$	50,461,001		\$0	\$ 50,461,001	\$0	\$ 50,461,001
<u>Use of Money and Property</u>							
Subtotal		\$1,419,046		\$0	\$1,419,046	\$1,419,046	\$0
<u>Revenues from other Agencies</u>							
Sales Tax: Public Safety Augment	\$	764,051	\$	-	\$ 764,051	\$ -	\$ 764,051
State Homeowners Property Tax Relief		200,000		-	200,000	-	200,000
State Motor Vehicle Licenses		18,424,278		-	18,424,278	-	18,424,278
Subtotal	\$	19,388,329		\$0	\$ 19,388,329	\$0	\$ 19,388,329
<u>Charges for Services</u>							
Subtotal		\$28,111		\$0	\$28,111	\$28,111	\$0
<u>Other Revenues</u>							
Subtotal		\$1,444,029		\$0	\$1,444,029	\$1,444,029	\$0
<u>Transfers In (less CIP)</u>							
Subtotal		\$2,154,748		\$0	\$2,154,748	\$2,154,748	\$0
TOTAL DISCRETIONARY REVENUES (LESS CIP TRANSFERS)		\$94,928,827		\$0	\$94,928,827	\$5,045,934	\$89,882,893

Source: City of Chula Vista and Economics Research Associates

## **Assessed Valuation Projections**

In order to project property tax revenues to the City resulting from the absorption of new development, ERA has estimated potential assessed valuation from all taxable land uses. ERA has calculated assessed valuation (AV) by capitalizing the potential income from a developed property for each non-residential land use type. Residential AV is estimated from recent residential market data retrieved from multiple secondary data sources. The estimated AV per acre or dwelling unit calculation is presented in Table 10.

For non-residential uses, we first derive gross building area per acre using achievable floor area ratio (FAR) estimates. This is adjusted to net building area (or leasable area) by assuming an appropriate building efficiency factors (based on industry standards) and vacancy rates. Applying prevailing annual rents to the net leased area gives the gross annual income per acre. An adjustment made to reflect operating costs gives net annual income per acre (for simplicity the table only shows the key outcomes). The prevailing capitalization rate (income to value ratio) applied to this net annual income gives the capitalized value per acre. Based on most recent data ERA has assumed a capitalization rate of 8.50 percent for non-residential uses, and 5.1 percent for rental multifamily units.

As shown in the Table, the AV calculations are based on a range of other market variables and assumptions, the sources of which are footnoted. Some of these variables could be highly volatile and could fluctuate (usually within a range) when examined over a longer period of time. It is important to carry out sensitivity tests for these market scenarios on a case by case basis.

Appropriate per unit AV assumptions are then applied to the project absorption matrix in order to derive annual AV absorption during the analysis periods. It is important to segregate annual AV from income producing properties (mainly non-residential and rental residential) and for-sale properties (mainly single family residential) as they likely to have variations in turnover rates.

AV absorption for the illustrative case is presented in Table 11

.

**Table 10 – Estimated Assessed Valuation by Land Use Type**

Land Uses	Density Factor	Units/Acre	Value per Unit	Rent /s.f./mo.	Building Efficiency	Occupancy Rate	Net Income/acre	Capitalization Rate	Assessed Value per Acre
<b>Non-Residential Uses</b>									
Retail <sup>2</sup>	0.28 FAR <sup>1</sup>	12,197 s.f.		\$ 1.80	80%	88%	\$ 157,284	8.50%	\$ 1,850,000
Office <sup>3</sup>	0.56 FAR <sup>1</sup>	24,394 s.f.		\$ 2.03	80%	88%	\$ 356,170	8.50%	\$ 4,190,000
Hotel <sup>4</sup>	0.30 FAR <sup>1</sup>	22 Rooms	\$ 120,000						\$ 2,614,000
General Industrial <sup>5</sup>	0.38 FAR <sup>1</sup>	16,553 s.f.		\$ 0.65	90%	88%	\$ 92,149	8.50%	\$ 1,084,000
Research/Limited Industrial <sup>5</sup>	0.40 FAR <sup>1</sup>	17,424 s.f.		\$ 1.59	80%	88%	\$ 210,199	8.50%	\$ 2,473,000
<b>Special Land Uses</b>									
Conference Center <sup>6</sup>							<i>Assumed Gross Assessed Value</i>		\$ 15,000,000
Golf Courses <sup>6</sup>									\$ 75,000
<b>Residential Uses</b>									
Single Family <sup>7</sup>				Rent/s.f./mo.	Avg. Unit size	Occupancy	Net Income/Unit	Cap. Rate	AV per DU
Multi Family (owner occupied) <sup>8</sup>									\$ 516,000
Multi Family (renter occupied) <sup>9</sup>									\$ 401,000
Mobile Homes <sup>6</sup>				\$ 1.60	800	95%	\$ 9,485	5.10%	\$ 186,000
									\$ 85,000

<sup>1</sup>FAR is Floor Area Ratio defined as the ratio of land area to building floor area (this is a measure of building density)

<sup>2</sup>Retail rents are based on CoStar data for 1st Q 2007 in the Southeast Corridor Market

<sup>3</sup>Office rents are based on CoStar data for 1st Q 2007 in the Southeast Corridor Market

<sup>4</sup>ERA estimates. Rooms are assumed to occupy 600s.f. on a gross basis

<sup>5</sup>ERA has estimated rents based on CoStar data for 1st Q 2007 in the Southeast Corridor Market

<sup>6</sup>ERA estimates

<sup>7</sup>Based on 2007 Q1 new home sales (median) in the Otay Ranch area as reported by Dataquick

<sup>8</sup>Based on 2007 Q1 Condo resales (median values inflated by 15%) in the Otay Ranch area as reported by Dataquick

<sup>9</sup>Rents based on current market comparables for newer apartments. Unit size, vacancy and Cap. Rate based on recent transactions as reported by CoStar Comps.

Note: The above estimates are for future development and includes land and improvement values.

ERA has not included the University property in assessed value calculations assuming that it will be publicly owned

Source: Economics Research Associates, CoStar Group, CB Richard Ellis, DataQuick Inc., and the City of Chula Vista

**Table 11 – SPA Assessed Value Absorption (Otay Ranch Villages 2, 3 and a Portion of Village 4)**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
<b>Income Producing Products</b>															
	(Millions of Dollars)														
Retail (acres)	\$ -	\$ -	\$ 13	\$ 26	\$ 37	\$ 37	\$ 37	\$ 37	\$ 37	\$ 37	\$ 37	\$ 37	\$ 37	\$ 37	\$ 37
Research/Limited Industrial (acres)	49	99	148	198	247	297	346	396	445	495	544	594	643	653	653
Multi Family (Rental)	25%	13	26	38	51	64	77	84	84	84	84	84	84	84	84
Gross Income Producing AV	\$ 62	\$ 124	\$ 200	\$ 275	\$ 348	\$ 410	\$ 467	\$ 516	\$ 566	\$ 615	\$ 665	\$ 714	\$ 764	\$ 774	\$ 774
Less Existing AV	15%	(9)	(19)	(30)	(41)	(52)	(62)	(70)	(77)	(85)	(92)	(100)	(107)	(115)	(116)
<b>Net New Inc. Product AV</b>	\$ 53	\$ 106	\$ 170	\$ 234	\$ 296	\$ 349	\$ 397	\$ 439	\$ 481	\$ 523	\$ 565	\$ 607	\$ 649	\$ 658	\$ 658
<b>For-Sale Products</b>															
	(Millions of Dollars)														
Single Family	\$ 77	\$ 155	\$ 232	\$ 310	\$ 387	\$ 464	\$ 509	\$ 509	\$ 509	\$ 509	\$ 509	\$ 509	\$ 509	\$ 509	\$ 509
Multi Family (Ownership)	75%	83	165	248	331	414	496	541	541	541	541	541	541	541	541
Gross For Sale AV	\$ 160	\$ 320	\$ 480	\$ 640	\$ 801	\$ 961	\$ 1,050	\$ 1,050	\$ 1,050	\$ 1,050	\$ 1,050	\$ 1,050	\$ 1,050	\$ 1,050	\$ 1,050
Less Existing AV	15%	(24)	(48)	(72)	(96)	(120)	(144)	(158)	(158)	(158)	(158)	(158)	(158)	(158)	(158)
<b>Net New For Sale Product AV</b>	\$ 136	\$ 272	\$ 408	\$ 544	\$ 680	\$ 817	\$ 893	\$ 893	\$ 893	\$ 893	\$ 893	\$ 893	\$ 893	\$ 893	\$ 893

Source: Otay Ranch Villages 2, 3 and 4 (Partial) PFFP; Economics Research Associates



## **Special Revenue Models**

As mentioned previously, ERA used separate models to calculate key tax revenues. In addition, ERA developed revenue factors for other revenues using an allocation methodology. These steps are described in the following sections.

### ***Property Taxes***

Property tax calculations take into consideration four major issues:

- The impact of Proposition 13 AV growth caps over the analysis period. Long-term calculations have to take into the gap between Proposition 13 limitations and actual market appreciation except in the case of resale.
- The impact of resale (annual turnovers) and real value appreciation that readjusts AV at resale.
- The impact of special tax sharing agreements between the City and other jurisdictions.
- The impact of redevelopment projects and tax increment contributions

As shown in Table 12, ERA calculated annual AV for income properties and for-sale properties based on the following assumption framework. Numbers in parentheses indicate illustrative case assumptions.

- i) Appreciation rate (2%)
- ii) Proposition 13 limit of 2 percent until a property is resold .
- iii) For-sale property turnover rate (10% annually)
- iv) Income property turnover rate (5% annually)

As per the existing agreement between the City and the County, the City will receive 50 percent of the combined City and County share of the total property taxes collected. Appropriate property tax allocations should be applied to the project area based on specific Tax Rate Area information.

ERA has assumed a one year lag between the assessment year and the receipt of corresponding property taxes.

Table 12 - Property Tax Estimates (Otay Ranch Villages 2, 3 and a Portion of Village 4)

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Annual For Sale Products AV Increment (\$Millions)	\$	136	\$ 136	\$ 136	\$ 136	\$ 136	\$ 136	\$ 76	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Income Producing Products AV (\$Millions)	\$	53	\$ 53	\$ 64	\$ 64	\$ 62	\$ 53	\$ 48	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 8	\$ -
APPRECIATION FACTOR:																
Year After Property First Sold	Annual Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Real Appreciation Rate	2.0%	100%	102%	104%	106%	108%	110%	113%	115%	117%	120%	122%	124%	127%	129%	132%
Inflation Rate	0.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Proposition 13 AV Limitation less Inflation of 2%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Income Products Annual Turnover Rate	5.0%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
For-Sale Products Annual Turnover Rate	10.0%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
For Sale Products																
YEAR PROPERTY FIRST SOLD:	Year 1	\$ 136.1	\$ 138.9	\$ 141.6	\$ 144.5	\$ 147.3	\$ 150.3	\$ 153.3	\$ 156.4	\$ 159.5	\$ 162.7	\$ 165.9	\$ 169.2	\$ 172.6	\$ 176.1	\$ 179.6
	Year 2	\$ 138.8	\$ 141.6	\$ 144.4	\$ 147.3	\$ 150.3	\$ 153.3	\$ 156.3	\$ 159.5	\$ 162.6	\$ 165.9	\$ 169.2	\$ 172.6	\$ 176.0	\$ 179.6	
	Year 3	\$ 141.6	\$ 144.4	\$ 147.3	\$ 150.3	\$ 153.3	\$ 156.3	\$ 159.5	\$ 162.6	\$ 165.9	\$ 169.2	\$ 172.6	\$ 176.0	\$ 179.6		
	Year 4	\$ 144.4	\$ 147.3	\$ 150.3	\$ 153.3	\$ 156.3	\$ 159.5	\$ 162.6	\$ 165.9	\$ 169.2	\$ 172.6	\$ 176.0	\$ 179.6			
	Year 5	\$ 147.3	\$ 150.3	\$ 153.3	\$ 156.3	\$ 159.5	\$ 162.6	\$ 165.9	\$ 169.2	\$ 172.6	\$ 176.0	\$ 179.6				
	Year 6	\$ 150.3	\$ 153.3	\$ 156.3	\$ 159.5	\$ 162.6	\$ 165.9	\$ 169.2	\$ 172.6	\$ 176.0	\$ 179.6					
	Year 7	\$ 85.7	\$ 87.4	\$ 89.1	\$ 90.9	\$ 92.7	\$ 94.6	\$ 96.5	\$ 98.4	\$ 100.4						
	Year 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							
	Year 9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							
	Year 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							
	Year 11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							
	Year 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							
	Year 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							
	Year 14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							
	Year 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							
FOR SALE PRODUCTS ASSESSED VALUE																
(In \$ Millions)	\$	136	\$ 278	\$ 425	\$ 578	\$ 737	\$ 902	\$ 1,005	\$ 1,025	\$ 1,046	\$ 1,067	\$ 1,088	\$ 1,110	\$ 1,132	\$ 1,155	\$ 1,178
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Income Products																
YEAR PROPERTY FIRST SOLD:	Year 1	\$ 52.9	\$ 54.0	\$ 55.1	\$ 56.2	\$ 57.3	\$ 58.4	\$ 59.6	\$ 60.8	\$ 62.0	\$ 63.2	\$ 64.5	\$ 65.8	\$ 67.1	\$ 68.5	\$ 69.8
	Year 2	\$ 54.0	\$ 55.0	\$ 56.1	\$ 57.3	\$ 58.4	\$ 59.6	\$ 60.8	\$ 62.0	\$ 63.2	\$ 64.5	\$ 65.8	\$ 67.1	\$ 68.4	\$ 69.8	
	Year 3	\$ 66.5	\$ 67.8	\$ 69.2	\$ 70.6	\$ 72.0	\$ 73.4	\$ 74.9	\$ 76.4	\$ 77.9	\$ 79.5	\$ 81.1	\$ 82.7	\$ 84.3		
	Year 4	\$ 67.8	\$ 69.2	\$ 70.6	\$ 72.0	\$ 73.4	\$ 74.9	\$ 76.4	\$ 77.9	\$ 79.5	\$ 81.1	\$ 82.7	\$ 84.3			
	Year 5	\$ 67.5	\$ 68.8	\$ 70.2	\$ 71.6	\$ 73.0	\$ 74.5	\$ 76.0	\$ 77.5	\$ 79.1	\$ 80.7	\$ 82.3				
	Year 6	\$ 58.4	\$ 59.6	\$ 60.8	\$ 62.0	\$ 63.2	\$ 64.5	\$ 65.8	\$ 67.1	\$ 68.4	\$ 69.8					
	Year 7	\$ 54.0	\$ 55.1	\$ 56.2	\$ 57.3	\$ 58.5	\$ 59.6	\$ 60.8	\$ 62.1	\$ 63.3						
	Year 8	\$ 48.3	\$ 49.3	\$ 50.2	\$ 51.2	\$ 52.3	\$ 53.3	\$ 54.4	\$ 55.5							
	Year 9	\$ 49.3	\$ 50.2	\$ 51.2	\$ 52.3	\$ 53.3	\$ 54.4	\$ 55.5								
	Year 10	\$ 50.2	\$ 51.2	\$ 52.3	\$ 53.3	\$ 54.4	\$ 55.5									
	Year 11	\$ 51.2	\$ 52.3	\$ 53.3	\$ 54.4	\$ 55.5										
	Year 12	\$ 52.3	\$ 53.3	\$ 54.4	\$ 55.5											
	Year 13	\$ 53.3	\$ 54.4	\$ 55.5												
	Year 14	\$ 54.4	\$ 55.5													
	Year 15	\$ 10.9	\$ 11.1													
INCOME PRODUCTS ASSESSED VALUE																
(In \$ Millions)	\$	53	\$ 108	\$ 177	\$ 248	\$ 320	\$ 385	\$ 447	\$ 504	\$ 564	\$ 625	\$ 689	\$ 755	\$ 823	\$ 851	\$ 868
TOTAL ASSESSED VALUE (in \$ Millions)																
Residential and Commercial	\$	189	\$ 386	\$ 601	\$ 826	\$ 1,057	\$ 1,287	\$ 1,452	\$ 1,530	\$ 1,609	\$ 1,692	\$ 1,777	\$ 1,865	\$ 1,955	\$ 2,005	\$ 2,045
TOTAL PROPERTY TAXES COLLECTED <sup>1</sup> (\$000s) @ 1.00%	\$	1,890	\$ 3,856	\$ 6,014	\$ 8,257	\$ 10,570	\$ 12,868	\$ 14,522	\$ 15,296	\$ 16,094	\$ 16,918	\$ 17,769	\$ 18,647	\$ 19,553	\$ 20,053	
ANNUAL INCREMENTAL PROPERTY TAXES TO THE CITY																
Potential Share to Chula Vista Gen. Fund @ 10.64%	\$	-	\$ 201,027	\$ 410,169	\$ 639,696	\$ 878,240	\$ 1,124,260	\$ 1,368,690	\$ 1,544,631	\$ 1,626,884	\$ 1,711,810	\$ 1,799,482	\$ 1,889,977	\$ 1,983,372	\$ 2,079,748	\$ 2,132,909
Potential Share to County General Fund @ 10.64%	\$	-	\$ 201,027	\$ 410,169	\$ 639,696	\$ 878,240	\$ 1,124,260	\$ 1,368,690	\$ 1,544,631	\$ 1,626,884	\$ 1,711,810	\$ 1,799,482	\$ 1,889,977	\$ 1,983,372	\$ 2,079,748	\$ 2,132,909
Total City and County Shares	\$	-	\$ 402,054	\$ 820,338	\$ 1,279,391	\$ 1,756,479	\$ 2,248,520	\$ 2,737,381	\$ 3,089,262	\$ 3,253,769	\$ 3,423,620	\$ 3,598,965	\$ 3,779,954	\$ 3,966,745	\$ 4,159,495	\$ 4,265,818
Payback to County as per Agreement 50.00%	\$	-	\$ (201,027)	\$ (410,169)	\$ (639,696)	\$ (878,240)	\$ (1,124,260)	\$ (1,368,690)	\$ (1,544,631)	\$ (1,626,884)	\$ (1,711,810)	\$ (1,799,482)	\$ (1,889,977)	\$ (1,983,372)	\$ (2,079,748)	\$ (2,132,909)
Net Annual Property Taxes to Chula Vista Gen. Fund	\$	-	\$ 201,027	\$ 410,169	\$ 639,696	\$ 878,240	\$ 1,124,260	\$ 1,368,690	\$ 1,544,631	\$ 1,626,884	\$ 1,711,810	\$ 1,799,482	\$ 1,889,977	\$ 1,983,372	\$ 2,079,748	\$ 2,132,909

<sup>1</sup>Reflects 1-year lag in Property Tax receipts

Source: Economics Research Associates

### ***Real Property Transfer Tax***

Chula Vista levies a \$0.55 real property transfer tax for every \$1,000 of A.V. each time a property is sold. This could be a significant revenue source for the City during the absorption period of a new project. Though impacts are not as significant after the development is fully absorbed, there is potential for a recurring revenue stream generated by internal turnovers of property within the development.

ERA's calculations and estimated results for real property transfer tax impacts for the illustrative case is presented Table 13. Property transfer taxes are calculated using the same turnover assumptions for property tax calculations. Property transfer tax impacts during the absorption period are much higher. These amounts may vary depending upon actual rate of absorption, achieved sale values, turnover rates and appreciation rates.

### ***Vehicle License Fee (VLF) Revenues***

As discussed earlier, changes in the State's budgetary allocations as of 2004 have had significant impacts on VLF allocations. Table 14 presents ERA's calculations of VLF impacts to the City from VLF and MVLF adjustment (property tax in lieu of VLF adjustment) using the illustrative example.

The first part of this analysis includes VLF impacts under the new VLF rate and allocation method. This is based on a per capita allocation of current year VLF dollars to future growth in population.

The second part of the analysis is the amount of Motor Vehicle in Lieu Fees (MVLF) adjustment received by the City from the state in order to be compensated for the loss in VLF revenues as a result of the rate cut. ERA has used VLF allocations published by the State Controller's Office (SCO), Division of Accounting and Reporting as of October 2005 to determine base values of MVLF. The SCO first estimates the amount of revenue Chula Vista would have received from the state Motor Vehicle License Fee Account in if the VLF rate were 2.0% and under the allocations as they would have been in FY04-05 prior to the changes in the 2004 Budget Act. Then the SCO determines the amount of remaining VLF revenues for Chula Vista in FY04-05 under the new 0.65% rate and new allocation formulas. The estimated MVLF is the difference between these two amounts, or approximately \$11.8 million. As per the new law the MVLF adjustment amount grows each year based on annual gross A.V. growth with respect to the 2004 base.

As shown in the Table, total annual VLF revenues can be significant if a project contributes substantially to the City's AV base. The illustrative case represents a net gain of \$1.77 billion in new AV in the City of Chula Vista at year 15, by which time the annual VLA and MVLF revenues add up to \$ 1.39 million annually.

**Table 13 - Real Property Transfer Tax Estimates (Otay Ranch Villages 2, 3 and a Portion of Village 4)**

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Annual For Sale Products AV Increment (\$Millions)	\$	136	\$ 136	\$ 136	\$ 136	\$ 136	\$ 136	\$ 76	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Income Producing Products AV (\$Millions)	\$	53	\$ 53	\$ 64	\$ 64	\$ 62	\$ 53	\$ 48	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 8	\$ -
For Sale Products New AV (\$Millions)	\$	136	\$ -	\$ -	\$ -	\$ 544	\$ -	\$ -	\$ -	\$ -	\$ 212	\$ -	\$ -	\$ -	\$ -	\$ -
Income Producing Products New AV (\$Millions)	\$	53	\$ -	\$ -	\$ -	\$ 243	\$ -	\$ -	\$ -	\$ -	\$ 227	\$ -	\$ -	\$ -	\$ -	\$ 135
APPRECIATION FACTOR:																
Year After Property First Sold	Annual Rate	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Real Appreciation Rate	2.0%	100%	102%	104%	106%	108%	110%	113%	115%	117%	120%	122%	124%	127%	129%	132%
Inflation Rate	0.0%															
Income Producing Products Turnover	5.0%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
For Sale Products Turnover	10.0%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Real Property Transfer Tax <sup>1</sup> (including annual turnovers) in \$000s																
For Sale Products		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
YEAR PROPERTY FIRST SOLD:	Year 1	\$ 74.8	\$ 7.6	\$ 7.8	\$ 7.9	\$ 8.1	\$ 8.3	\$ 8.4	\$ 8.6	\$ 8.8	\$ 8.9	\$ 9.1	\$ 9.3	\$ 9.5	\$ 9.7	\$ 9.9
	Year 2	\$	\$ 76.3	\$ 7.8	\$ 7.9	\$ 8.1	\$ 8.3	\$ 8.4	\$ 8.6	\$ 8.8	\$ 8.9	\$ 9.1	\$ 9.3	\$ 9.5	\$ 9.7	\$ 9.9
	Year 3			\$ 77.9	\$ 7.9	\$ 8.1	\$ 8.3	\$ 8.4	\$ 8.6	\$ 8.8	\$ 8.9	\$ 9.1	\$ 9.3	\$ 9.5	\$ 9.7	\$ 9.9
	Year 4				\$ 79.4	\$ 8.1	\$ 8.3	\$ 8.4	\$ 8.6	\$ 8.8	\$ 8.9	\$ 9.1	\$ 9.3	\$ 9.5	\$ 9.7	\$ 9.9
	Year 5					\$ 81.0	\$ 8.3	\$ 8.4	\$ 8.6	\$ 8.8	\$ 8.9	\$ 9.1	\$ 9.3	\$ 9.5	\$ 9.7	\$ 9.9
	Year 6						\$ 82.6	\$ 8.4	\$ 8.6	\$ 8.8	\$ 8.9	\$ 9.1	\$ 9.3	\$ 9.5	\$ 9.7	\$ 9.9
	Year 7							\$ 47.1	\$ 4.8	\$ 4.9	\$ 5.0	\$ 5.1	\$ 5.2	\$ 5.3	\$ 5.4	\$ 5.5
	Year 8								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Year 9								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Year 10									\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Year 11										\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Year 12											\$ -	\$ -	\$ -	\$ -	\$ -
	Year 13												\$ -	\$ -	\$ -	\$ -
	Year 14													\$ -	\$ -	\$ -
	Year 15														\$ -	\$ -
For Sale Products																
		\$ 74,850	\$ 83,981	\$ 93,448	\$ 103,260	\$ 113,428	\$ 123,960	\$ 97,690	\$ 56,393	\$ 57,521	\$ 58,671	\$ 59,845	\$ 61,041	\$ 62,262	\$ 63,508	\$ 64,778
For Sale Products Property Transfer Tax (with lag period) <sup>2</sup>																
		\$ 74,850	\$ 83,981	\$ 93,448	\$ 103,260	\$ 113,428	\$ 123,960	\$ 97,690	\$ 56,393	\$ 57,521	\$ 58,671	\$ 59,845	\$ 61,041	\$ 62,262	\$ 63,508	\$ 64,778
Income Products (\$000s)																
YEAR PROPERTY FIRST SOLD:	Year 1	\$ 29.1	\$ 1.5	\$ 1.5	\$ 1.5	\$ 1.6	\$ 1.6	\$ 1.6	\$ 1.7	\$ 1.7	\$ 1.7	\$ 1.8	\$ 1.8	\$ 1.8	\$ 1.9	\$ 1.9
	Year 2	\$	\$ 29.7	\$ 1.5	\$ 1.5	\$ 1.6	\$ 1.6	\$ 1.6	\$ 1.7	\$ 1.7	\$ 1.7	\$ 1.8	\$ 1.8	\$ 1.8	\$ 1.9	\$ 1.9
	Year 3			\$ 36.6	\$ 1.9	\$ 1.9	\$ 1.9	\$ 2.0	\$ 2.0	\$ 2.1	\$ 2.1	\$ 2.1	\$ 2.2	\$ 2.2	\$ 2.3	\$ 2.3
	Year 4				\$ 37.3	\$ 1.9	\$ 1.9	\$ 2.0	\$ 2.0	\$ 2.1	\$ 2.1	\$ 2.1	\$ 2.2	\$ 2.2	\$ 2.3	\$ 2.3
	Year 5					\$ 37.1	\$ 1.9	\$ 1.9	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.1	\$ 2.1	\$ 2.2	\$ 2.2	\$ 2.3
	Year 6						\$ 32.1	\$ 1.6	\$ 1.7	\$ 1.7	\$ 1.7	\$ 1.8	\$ 1.8	\$ 1.8	\$ 1.9	\$ 1.9
	Year 7							\$ 29.7	\$ 1.5	\$ 1.5	\$ 1.6	\$ 1.6	\$ 1.6	\$ 1.7	\$ 1.7	\$ 1.7
	Year 8								\$ 26.6	\$ 1.4	\$ 1.4	\$ 1.4	\$ 1.4	\$ 1.5	\$ 1.5	\$ 1.5
	Year 9									\$ 27.1	\$ 1.4	\$ 1.4	\$ 1.4	\$ 1.5	\$ 1.5	\$ 1.5
	Year 10										\$ 27.6	\$ 1.4	\$ 1.4	\$ 1.5	\$ 1.5	\$ 1.5
	Year 11											\$ 28.2	\$ 1.4	\$ 1.5	\$ 1.5	\$ 1.5
	Year 12												\$ 28.7	\$ 1.5	\$ 1.5	\$ 1.5
	Year 13													\$ 29.3	\$ 1.5	\$ 1.5
	Year 14														\$ 6.0	\$ 0.3
	Year 15															\$ -
Income Products																
		\$ 29,101	\$ 31,167	\$ 39,603	\$ 42,260	\$ 44,072	\$ 41,117	\$ 40,518	\$ 39,098	\$ 41,234	\$ 43,440	\$ 45,719	\$ 48,070	\$ 50,498	\$ 29,074	\$ 23,859
Income Products Property Transfer Tax (with Lag) <sup>3</sup>																
		\$ 29,101	\$ 31,167	\$ 39,603	\$ 42,260	\$ 44,072	\$ 41,117	\$ 40,518	\$ 39,098	\$ 41,234	\$ 43,440	\$ 45,719	\$ 48,070	\$ 50,498	\$ 29,074	\$ 23,859
TOTAL ANNUAL PROPERTY TRANSFER TAX																
		\$ -	\$ 103,950	\$ 115,148	\$ 133,051	\$ 145,520	\$ 157,499	\$ 165,077	\$ 138,207	\$ 95,490	\$ 98,755	\$ 102,112	\$ 105,563	\$ 109,112	\$ 112,760	\$ 92,582

<sup>1</sup>\$0.55 for every \$1000 of real property sale value

<sup>2</sup>One year time lag

Table 14 - Motor Vehicle License Fee Estimates (Otay Ranch Villages 2, 3 and a Portion of Village 4)

**VLF Revenues**

Current Population Of the City <sup>1</sup> =	220,036
Current Allocation of 0.65% VLF =	\$ 1,328,857
Per Capita VLF Allocation =	\$ 6.04

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
SPA Population Growth	1,209	2,419	3,628	4,837	6,047	7,256	7,930	7,930	7,930	7,930	7,930	7,930	7,930	7,930	7,930
<b>VLF Revenues Attributed To SPA</b>	<b>\$ 7,303</b>	<b>\$ 14,607</b>	<b>\$ 21,910</b>	<b>\$ 29,214</b>	<b>\$ 36,517</b>	<b>\$ 43,821</b>	<b>\$ 47,889</b>	<b>\$ 47,889</b>	<b>\$ 47,889</b>	<b>\$ 47,889</b>	<b>\$ 47,889</b>	<b>\$ 47,889</b>	<b>\$ 47,889</b>	<b>\$ 47,889</b>	<b>\$ 47,889</b>

**Motor Vehicle In Lieu Fees (MVLf) Adjustment**

Base Year (2004) Assessed Valuation of the City (\$000) =	\$ 15,596,196
Base Year (2004) Motor Vehicle In Lieu Fees Adjustment (MVLf) (\$000) =	\$ 11,832

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Cumulative AV of New Developments (\$000s)	\$ 189,001	\$ 385,631	\$ 601,426	\$ 825,699	\$ 1,057,001	\$ 1,286,808	\$ 1,452,223	\$ 1,529,556	\$ 1,609,401	\$ 1,691,828	\$ 1,776,909	\$ 1,864,717	\$ 1,955,326	\$ 2,005,307	\$ 2,045,411
AV Adjustment for Base Value (\$000)	\$ (33,353)	\$ (66,706)	\$ (102,002)	\$ (137,297)	\$ (172,315)	\$ (205,668)	\$ (227,557)	\$ (234,976)	\$ (242,395)	\$ (249,814)	\$ (257,233)	\$ (264,652)	\$ (272,071)	\$ (273,555)	\$ (273,555)
Adjusted AV of Development(\$000)	\$ 155,648	\$ 318,924	\$ 499,424	\$ 688,402	\$ 884,685	\$ 1,081,140	\$ 1,224,666	\$ 1,294,580	\$ 1,367,006	\$ 1,442,014	\$ 1,519,676	\$ 1,600,065	\$ 1,683,255	\$ 1,731,752	\$ 1,771,856
Cumulative Citywide AV Growth (\$000s)	\$ 15,751,843	\$ 15,915,120	\$ 16,095,619	\$ 16,284,597	\$ 16,480,881	\$ 16,677,335	\$ 16,820,862	\$ 16,890,775	\$ 16,963,201	\$ 17,038,209	\$ 17,115,871	\$ 17,196,260	\$ 17,279,451	\$ 17,327,948	\$ 17,368,051
Percent Increase in AV	0.998%	1.037%	1.134%	1.174%	1.205%	1.192%	0.861%	0.416%	0.429%	0.442%	0.456%	0.470%	0.484%	0.281%	0.231%
Cumulative Citywide MVLf (\$000s)	\$ 11,950	\$ 12,074	\$ 12,211	\$ 12,354	\$ 12,503	\$ 12,652	\$ 12,761	\$ 12,814	\$ 12,869	\$ 12,926	\$ 12,985	\$ 13,046	\$ 13,109	\$ 13,146	\$ 13,176
<b>Annual MVLf Adjustment Attributed To SPA</b>	<b>\$ 118,083</b>	<b>\$ 241,953</b>	<b>\$ 378,890</b>	<b>\$ 522,259</b>	<b>\$ 671,170</b>	<b>\$ 820,211</b>	<b>\$ 929,098</b>	<b>\$ 982,138</b>	<b>\$ 1,037,084</b>	<b>\$ 1,093,990</b>	<b>\$ 1,152,908</b>	<b>\$ 1,213,895</b>	<b>\$ 1,277,008</b>	<b>\$ 1,313,801</b>	<b>\$ 1,344,225</b>
<b>TOTAL ANNUAL VLF REVENUES</b>	<b>\$ 125,386</b>	<b>\$ 256,560</b>	<b>\$ 400,800</b>	<b>\$ 551,473</b>	<b>\$ 707,688</b>	<b>\$ 864,032</b>	<b>\$ 976,987</b>	<b>\$ 1,030,027</b>	<b>\$ 1,084,973</b>	<b>\$ 1,141,878</b>	<b>\$ 1,200,797</b>	<b>\$ 1,261,784</b>	<b>\$ 1,324,897</b>	<b>\$ 1,361,689</b>	<b>\$ 1,392,114</b>

<sup>1</sup>ERA estimates based on dwelling unit inventory

<sup>2</sup>Applying the Citywide AV Growth Rate (includes AV growth due to each scenario) to Current MVLf

### **Sales Taxes**

ERA's sales tax impacts are derived from the potential capture of retail sales in the City of Chula Vista generated by the expenditure in the City by the numerous demand drivers included in the project. As a result, sales tax impacts include all retail sales that can be attributed to the project within the City of Chula Vista, and not just retail sales that occur 'on-site' within the project boundaries. The first step in this market driven retail model is to delineate the key demand drivers. This includes retail support that can be potentially generated by the various types of land uses included in the project:

- i) Captured household expenditures – from residential uses
- ii) Employee expenditures – from office and industrial uses
- iii) Overnight visitor expenditures – from hotel/lodging uses

If the project includes a share of regional serving retail, then a part of the retail support will come from external sources which may include:

- i) Shoppers from neighboring communities and the region
- ii) Tourists
- iii) Mexican (cross border) shoppers

ERA's analysis approach includes the following steps, and is illustrated in Table 15:

**Household Based Retail Sales** ERA derived annual household incomes in the following manner:

Owner occupied homes: Assuming a 30 year mortgage for 80 percent of the home value at 6 percent annual interest, and further assuming that annual mortgage payment represents a third of the annual household income.

Renter occupied homes: Assuming that annual rental payment represents 35 percent of total annual household income.

We then established benchmarks for average retail expenditures per household in San Diego County, using California State Board of Equalization's (SBE) retail sales data. Using the household income based Consumer Expenditure Survey by the Bureau of Labor Statistics (BLS), ERA estimated that the corresponding average potential household expenditure in the SPA project compared to household expenditures countywide (by comparing income to expenditure ratios). SPA expenditures per household were adjusted up or down using this information. (in the illustrative case it was adjusted down to 95.3 percent of regional averages). Note that the SBE benchmarks are adjusted to include both taxable and non-taxable sales in order to be consistent with the BLS data.

Applying sales per s.f. estimates to the regional retail distribution by type of retail gives the potential capture of dollars by retail type. Potential household expenditures are then distributed by broad retail types. Appropriate capture rates were applied to each retail category depending upon their existing mix and competitiveness in the City or region.

Although the model assumes retail capture to be a static measure, it could change in the future depending upon the retail diversity available within the City. This should be a part of the sensitivity analysis on a project by project basis.

**Employee Based Sales:** We estimated employment-based retail by using an average daily spending of \$5.00 and a 235-day work year applied to the employment generated within the project. Once again appropriate capture rates are applied depending on the proximity and variety of available retail.

Sum of the total sales generated by each demand driver gives gross annual new retail sales capture in Chula Vista attributed to the project. This gross sales figure is further adjusted to reflect taxable sales. This is based on typical mixes of retailers in the retail center typologies defined. A sales tax rate of 1 percent is applied to determine the City of Chula Vista's share of sales tax revenues. As the illustrative case does not include any regional serving retail uses or any lodging related uses, this analysis ignores the impact from other any other demand drivers. These other demand drivers should be considered on a case specific basis as applicable.

**Internal Retail Transfer Adjustments:** When analyzing projects that include retail uses, which go beyond the neighborhood-serving realm, the methodology should incorporate an additional step to determine the impact of internal retail transfers.

New retail developments may perform at their desired sales performance levels by virtue of their quality and tenant mix even though they may be transferring retail sales from other existing retailers in the City. Retail transfer analysis should be considered on a case by case basis and is likely to be called for in projects that include regional serving retail or 'big box' power centers. This is not a standardized method but is dependent upon a number of factors including:

- i) Type of retail (neighborhood, community, regional or super-regional)
- ii) Trade area definition
- iii) Existing retail inventory within the trade area
- iv) Future growth in population and incomes

Table 15 - Estimated Retail Sales Taxes (Otay Ranch Villages 2, 3 and a Portion of Village 4)

<b>Average HH Incomes</b>	
Single Family	\$ 90,000
Multi Family	
Ownership	\$ 66,000
Rental	\$ 44,000

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Households																
Single Family		150	300	450	600	750	900	986	986	986	986	986	986	986	986	986
Multi Family																
Ownership	75%	206	413	619	825	1,031	1,238	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350
Rental	25%	69	138	206	275	344	413	450	450	450	450	450	450	450	450	450
Mobile Homes																
Total Units		425	850	1275	1700	2125	2550	2786	2786	2786	2786	2786	2786	2786	2786	2786
Total Employees		409	818	1,360	1,903	2,426	2,835	3,244	3,653	4,062	4,470	4,879	5,288	5,697	5,779	5,779
Aggregate Incomes (\$ Millions)		\$ 30.14	\$ 60.28	\$ 90.41	\$ 120.55	\$ 150.69	\$ 180.83	\$ 197.64	\$ 197.64	\$ 197.64	\$ 197.64	\$ 197.64	\$ 197.64	\$ 197.64	\$ 197.64	\$ 197.64
Average Annual Income/HH (SPA)		\$ 70,940	(at buildout)													
Countywide Income /HH		\$ 76,975														
Countywide Retail Exp/HH		\$ 31,616														
Retail Expenditure/HH Adj. Factor for SPA		95.3%	\$ 30,125													
Gross Retail Sales from SPA Residents (\$000s)																
Neghborhood Center	33%	\$ 4,286	\$ 8,573	\$ 12,859	\$ 17,146	\$ 21,432	\$ 25,718	\$ 28,098	\$ 28,098	\$ 28,098	\$ 28,098	\$ 28,098	\$ 28,098	\$ 28,098	\$ 28,098	\$ 28,098
Community Center	20%	2,513	5,026	7,540	10,053	12,566	15,079	16,475	16,475	16,475	16,475	16,475	16,475	16,475	16,475	16,475
Regional Center	4%	458	915	1,373	1,830	2,288	2,745	2,999	2,999	2,999	2,999	2,999	2,999	2,999	2,999	2,999
Super Regional Center	7%	940	1,879	2,819	3,758	4,698	5,637	6,159	6,159	6,159	6,159	6,159	6,159	6,159	6,159	6,159
Other Centers	36%	4,606	9,213	13,819	18,425	23,031	27,638	30,196	30,196	30,196	30,196	30,196	30,196	30,196	30,196	30,196
Chula Vista Capture (\$000s)																
Neghborhood Center	90%	\$ 3,858	\$ 7,715	\$ 11,573	\$ 15,431	\$ 19,289	\$ 23,146	\$ 25,289	\$ 25,289	\$ 25,289	\$ 25,289	\$ 25,289	\$ 25,289	\$ 25,289	\$ 25,289	\$ 25,289
Community Center	90%	2,262	4,524	6,786	9,047	11,309	13,571	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827
Regional Center	35%	160	320	480	641	801	961	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050
Super Regional Center	70%	658	1,315	1,973	2,631	3,288	3,946	4,311	4,311	4,311	4,311	4,311	4,311	4,311	4,311	4,311
Other Centers	40%	1,843	3,685	5,528	7,370	9,213	11,055	12,078	12,078	12,078	12,078	12,078	12,078	12,078	12,078	12,078
Gross Retail Sales from SPA Employees (\$000s)																
Annual Expenditure / Employee	\$ 1,175															
Neghborhood Center	60%	\$ 288	\$ 577	\$ 865	\$ 1,341	\$ 1,710	\$ 1,999	\$ 2,287	\$ 2,575	\$ 2,863	\$ 3,152	\$ 3,440	\$ 3,728	\$ 4,016	\$ 4,074	\$ 4,074
Community Center	20%	96	192	320	447	570	666	762	858	954	1,051	1,147	1,243	1,339	1,358	1,358
Regional Center	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Super Regional Center	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Centers	20%	96	192	320	447	570	666	762	858	954	1,051	1,147	1,243	1,339	1,358	1,358
Taxable Retail Sales (\$000s)																
	% Taxable															
Neghborhood Center	64%	\$ 2,635	\$ 5,269	\$ 7,964	\$ 10,658	\$ 13,344	\$ 15,979	\$ 17,524	\$ 17,707	\$ 17,890	\$ 18,073	\$ 18,256	\$ 18,440	\$ 18,623	\$ 18,659	\$ 18,659
Community Center	77%	1,814	3,627	5,465	7,303	9,137	10,951	11,991	12,065	12,139	12,213	12,286	12,360	12,434	12,449	12,449
Regional Center	97%	156	312	468	624	779	935	1,022	1,022	1,022	1,022	1,022	1,022	1,022	1,022	1,022
Super Regional Center	100%	658	1,315	1,973	2,631	3,288	3,946	4,311	4,311	4,311	4,311	4,311	4,311	4,311	4,311	4,311
Other Centers	97%	1,877	3,755	5,663	7,571	9,474	11,352	12,436	12,529	12,622	12,715	12,808	12,901	12,994	13,012	13,012
Total Taxable Retail Sales (\$000s)		\$ 7,139	\$ 14,279	\$ 21,532	\$ 28,786	\$ 36,024	\$ 43,163	\$ 47,283	\$ 47,633	\$ 47,983	\$ 48,334	\$ 48,684	\$ 49,034	\$ 49,384	\$ 49,454	\$ 49,454
Annual Sales Taxes to the City @		1%	71,394	142,787	215,325	287,862	360,236	431,630	472,831	476,333	479,834	483,336	486,837	490,339	493,840	494,540

Source: Economics Research Associates



### ***Transient Occupancy Taxes***

As the illustrative case does not include any hotels there are no transient occupancy taxes (TOT) generated. If a SPA were to include a hotel component, TOT will be an important revenue source to the City that should be calculated separately. The first step in calculating TOT is to determine annual hotel room revenues by applying appropriate occupancy and average daily rate (ADR) assumptions to the hotel room inventory on an annualized basis. The City's TOT revenue is given by applying the prevailing 10 percent TOT rate to the annual hotel room revenues.

### **Other Revenues**

ERA's allocation method for other discretionary revenues is presented in Table 16. Other property tax related revenues are allocated by share of AV by land use. Revenues from other agencies are allocated on a per capita basis, except for State Homeowners Property Tax Relief, which allocated on a per dwelling unit basis. Business license taxes are allocated on the basis of private sector employment. Franchise fees and Utility taxes are distributed by acres of land with distribution factors taken from the City's existing FIND fiscal model.

### **Total Discretionary Revenues**

Total discretionary revenues to the City attributed to the SPA are calculated by consolidating all of the above revenue components. We first derive revenues that are related to measures of incremental growth, essentially from the factors developed for 'other' revenues. We then add all of the revenue components calculated by special models. The result gives the total discretionary revenues generated annually through the 15-year analysis period attributed to incremental growth under in the SPA. This calculation is presented in Table 17. As seen in the Table, property taxes followed by VLF revenues account for the largest share of the total revenue stream.

### ***Net Fiscal Impact***

The difference between total annual discretionary revenues and total annual expenditures gives the net annual fiscal impact for the scenario analyzed. A positive impact reflects a net annual surplus to the City's General Fund while a negative impact reflects an annual loss in discretionary revenues resulting from incremental growth. As shown in Table 18, the net impact from the illustrative case is negative until year 5 (with the exception of year 2) after which point the project has a positive contribution to the General Fund, with a net annual impact of \$0.99 million in year 15.

**Table 16: Chula Vista - Other Discretionary Revenue Allocation Factors**

**Current Citywide Conditions**

Population	220,036
Dwelling Units	76,304
Employees	56,083

<u>Land Uses</u>	<u>Developed Acres</u>	<u>Employees</u> (estimated)	<u>AV Share (Estimates)</u>
Commercial	1,965	35,658	11%
Industrial	943	17,925	8%
Residential	19,358		81%
Subtotal Taxable	22,266	53,583	
Other (Parks, Public/Quasi-public, Open Space)	7,074	2,500	
Total	29,339	56,083	

**Incremental Revenue Factors by Development Unit**

<u>Revenue Category</u>	<u>Current Revenues</u>	<u>Allocation Method</u>	<u>Share</u>	<u>Allocation</u>	<u>Units</u>
<b>Property Taxes</b>					
Current Taxes - Secured	\$ 18,637,563	Calculated Separately		-	
State Secured - Unitary	350,000	Commercial AV	11%	\$19.67	Acre
		Industrial AV	8%	\$28.50	Acre
		Residential AV	81%	\$14.70	Acre
Current Taxes - Unsecured	840,000	Commercial AV	11%	\$47.21	Acre
		Industrial AV	8%	\$68.41	Acre
		Residential AV	81%	\$35.27	Acre
Delinquent Taxes	206,000	Commercial AV	11%	\$11.58	Acre
		Industrial AV	8%	\$16.78	Acre
		Residential AV	81%	\$8.65	Acre
<b>Other Local Taxes</b>					
Sales and Use Taxes	26,788,000	Calculated Separately			
Franchise Fees <sup>1</sup>	10,249,651	Commercial Land	7%	\$365.06	Acre
		Industrial Land	3%	\$326.15	Acre
		Residential Land	90%	\$476.54	Acre
Utility Taxes <sup>1</sup>	7,435,816	Commercial Land	9%	\$340.51	Acre
		Industrial Land	4%	\$315.48	Acre
		Residential Land	87%	\$334.19	Acre
Business License Tax	1,169,456	Employees (Non-Public)		\$21.83	Employee
Transient Occupancy Taxes	2,410,301	Calculated Separately		-	
Real Property Transfer Tax	2,407,777	Calculated Separately		-	
<b>Revenues from other Agencies</b>					
Sales Tax: Public Safety Augment	764,051	People		\$3.47	Person
State Homeowners Property Tax Relief	200,000	Dwelling Units		\$2.62	DU
State Motor Vehicle Licenses	18,424,278	Calculated Separately		-	
<b>TOTAL DISCRETIONARY REVENUES</b>	<b>\$ 89,882,893</b>				

<sup>1</sup>Allocation shares by land use based on FIND model estimates

Source: Economics Research Associates

**Table 17 - Incremental Revenue Summary in 2006 Dollars (Otay Ranch Villages 2, 3 and a Portion of Village 4)**

Revenue Drivers		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Population (Persons)		1,209	2,419	3,628	4,837	6,047	7,256	7,930	7,930	7,930	7,930	7,930	7,930	7,930	7,930	7,930
Private Employment (Employees)		409	818	1,360	1,903	2,426	2,835	3,244	3,653	4,062	4,470	4,879	5,288	5,697	5,779	5,779
Dwelling Units		425	850	1,275	1,700	2,125	2,550	2,786	2,786	2,786	2,786	2,786	2,786	2,786	2,786	2,786
Commercial Land (Acres)		-	-	7	14	20	20	20	20	20	20	20	20	20	20	20
Industrial Land (Acres)		20	40	60	80	100	120	140	160	180	200	220	240	260	264	264
Residential Land (Acres)		50	100	150	200	250	300	328	328	328	328	328	328	328	328	328

  

Annual Revenues	Revenue Factors	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
		(Revenues in \$000s)														
Population (Persons)	\$ 3.47	\$ 4.20	\$ 8.40	\$ 12.60	\$ 16.80	\$ 21.00	\$ 25.20	\$ 27.53	\$ 27.53	\$ 27.53	\$ 27.53	\$ 27.53	\$ 27.53	\$ 27.53	\$ 27.53	\$ 27.53
Private Employment (Employees)	\$ 21.83	8.9	17.8	29.7	41.5	52.9	61.9	70.8	79.7	88.6	97.6	106.5	115.4	124.3	126.1	126.1
Dwelling Units	\$ 2.62	1.1	2.2	3.3	4.5	5.6	6.7	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Commercial Land (Acres)	\$ 784.02	-	-	5.5	11.0	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7
Industrial Land (Acres)	\$ 755.31	15.1	30.2	45.3	60.4	75.5	90.6	105.7	120.8	136.0	151.1	166.2	181.3	196.4	199.4	199.4
Residential Land (Acres)	\$ 869.35	43.5	87.1	130.6	174.1	217.6	261.2	285.3	285.3	285.3	285.3	285.3	285.3	285.3	285.3	285.3
Property Taxes	-	201.0	410.2	639.7	878.2	1,124.3	1,368.7	1,544.6	1,626.9	1,711.8	1,799.5	1,890.0	1,983.4	2,079.7	2,132.9	2,132.9
Property Transfer Taxes	-	104.0	115.1	133.1	145.5	157.5	165.1	138.2	95.5	98.8	102.1	105.6	109.1	112.8	92.6	92.6
VLF Revenues		125.4	256.6	400.8	551.5	707.7	864.0	977.0	1,030.0	1,085.0	1,141.9	1,200.8	1,261.8	1,324.9	1,361.7	1,392.1
Sales and Use Taxes		71.4	142.8	215.3	287.9	360.2	431.6	472.8	476.3	479.8	483.3	486.8	490.3	493.8	494.5	494.5
<b>Total Revenues (\$000s)</b>		<b>269.6</b>	<b>850.1</b>	<b>1,368.5</b>	<b>1,920.4</b>	<b>2,480.0</b>	<b>3,038.6</b>	<b>3,496.0</b>	<b>3,725.6</b>	<b>3,847.6</b>	<b>4,020.2</b>	<b>4,197.7</b>	<b>4,380.2</b>	<b>4,567.8</b>	<b>4,710.1</b>	<b>4,773.5</b>

Source: Economics Research Associates

**Table 18 - Net Fiscal Impacts in 2006 Dollars (Otay Ranch Villages 2, 3 and a Portion of Village 4)**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
<b>Total Expenditures (\$000s)</b>	\$ 419.9	\$ 848.2	\$ 1,386.7	\$ 1,935.8	\$ 2,481.0	\$ 2,947.1	\$ 3,242.6	\$ 3,315.5	\$ 3,389.6	\$ 3,464.9	\$ 3,541.3	\$ 3,618.9	\$ 3,697.7	\$ 3,743.3	\$ 3,780.7
<b>Total Revenues (\$000s)</b>	\$ 269.6	\$ 850.1	\$ 1,368.5	\$ 1,920.4	\$ 2,480.0	\$ 3,038.6	\$ 3,496.0	\$ 3,725.6	\$ 3,847.6	\$ 4,020.2	\$ 4,197.7	\$ 4,380.2	\$ 4,567.8	\$ 4,710.1	\$ 4,773.5
<b>Net Fiscal Impacts</b>	\$ (150.2)	\$ 1.9	\$ (18.2)	\$ (15.5)	\$ (1.0)	\$ 91.5	\$ 253.4	\$ 410.1	\$ 458.0	\$ 555.4	\$ 656.4	\$ 761.3	\$ 870.0	\$ 966.8	\$ 992.8

Source: Economics Research Associates



## **GENERAL LIMITING CONDITIONS**

Every reasonable effort has been made to ensure that the data contained in this report are accurate as of the date of this study; however, factors exist that are outside the control of Economics Research Associates and that may affect the estimates and/or projections noted herein. This study is based on estimates, assumptions and other information developed by Economics Research Associates from its independent research effort, general knowledge of the industry, and information provided by and consultations with the client and the client's representatives. No responsibility is assumed for inaccuracies in reporting by the client, the client's agent and representatives, or any other data source used in preparing or presenting this study.

This report is based on information that was current as of February 12, 2008 and Economics Research Associates has not undertaken any update of its research effort since such date.

Because future events and circumstances, many of which are not known as of the date of this study, may affect the estimates contained therein, no warranty or representation is made by Economics Research Associates that any of the projected values or results contained in this study will actually be achieved.

Possession of this study does not carry with it the right of publication thereof or to use the name of "Economics Research Associates" in any manner without first obtaining the prior written consent of Economics Research Associates. No abstracting, excerpting or summarization of this study may be made without first obtaining the prior written consent of Economics Research Associates. This report is not to be used in conjunction with any public or private offering of securities, debt, equity, or other similar purpose where it may be relied upon to any degree by any person other than the client, nor is any third party entitled to rely upon this report, without first obtaining the prior written consent of Economics Research Associates. This study may not be used for purposes other than that for which it is prepared or for which prior written consent has first been obtained from Economics Research Associates.

This study is qualified in its entirety by, and should be considered in light of, these limitations, conditions and considerations.

## **APPENDICES**

**A-1**  
**Chula Vista - Service (Direct) Cost Factors**

	<u>Service Cost</u>	<u>Allocation Variable</u>	<u>Land Uses</u>	<u>Acres</u>	<u>DUs</u>	<u>Cost Allocation</u>	<u>Distributed Cost</u>	<u>Cost/Unit</u>	<u>Unit</u>
<b><u>LEGISLATIVE AND ADMINISTRATION</u></b>									
<b>Administration</b>									
<i>Public Information</i>	\$ 30,821	Dwelling Units	Residential	76,304	100%	\$	30,821	\$ 0.40	/DU
<b><u>DEVELOPMENT AND MAINTENANCE SERVICES</u></b>									
<b>Community Development</b>									
<i>Economic Development</i>	\$ 1,230,638	Comm./Ind. Land (EDU Share)	Retail	964	67%	\$	822,364	\$ 853.22	/Acre
			Office	214	16%	\$	197,306	\$ 921.47	/Acre
			Hotel	29	1%	\$	15,718	\$ 545.38	/Acre
			Industrial	868	16%	\$	195,251	\$ 225.05	/Acre
<i>Environmental Services</i>	\$ 703,168	General Land Use (EDU Share)	Retail	964	7.3%	\$	50,993	\$ 52.91	/Acre
			Office	214	1.7%	\$	12,235	\$ 57.14	/Acre
			Hotel	29	0.1%	\$	975	\$ 33.82	/Acre
			Industrial	868	1.7%	\$	12,107	\$ 13.96	/Acre
			Other	2,016	2.4%	\$	16,767	\$ 8.32	/Acre
			Residential	76,304	86.8%	\$	610,091	\$ 8.00	/DU
<b>Planning and Building Services</b>									
<i>Planning Services</i>									
<i>Advanced Planning</i>	\$ 1,245,407	General Land Use (EDU Share)	Retail	964	7.3%	\$	90,316	\$ 93.70	/Acre
			Office	214	1.7%	\$	21,669	\$ 101.20	/Acre
			Hotel	29	0.1%	\$	1,726	\$ 59.90	/Acre
			Industrial	868	1.7%	\$	21,443	\$ 24.72	/Acre
			Other	2,016	2.4%	\$	29,696	\$ 14.73	/Acre
			Residential	-	76,304	86.8%	\$ 1,080,556	\$ 14.16	/DU
<i>Building Services</i>									
<i>Code Enforcement</i>	\$ 82,837	General Land Use (EDU Share)	Retail	964	7.3%	\$	6,007	\$ 6.23	/Acre
			Office	214	1.7%	\$	1,441	\$ 6.73	/Acre
			Hotel	29	0.1%	\$	115	\$ 3.98	/Acre
			Industrial	868	1.7%	\$	1,426	\$ 1.64	/Acre
			Other	2,016	2.4%	\$	1,975	\$ 0.98	/Acre
			Residential	-	76,304	86.8%	\$ 71,872	\$ 0.94	/DU
<b>Engineering</b>									
<i>Transportation Services</i>	\$ 2,675,231	General Land Use (Trip Share)	Retail	964	44.9%	\$	1,200,409	\$ 1,245.44	/Acre
			Office	214	5.3%	\$	141,181	\$ 659.35	/Acre
			Hotel	29	0.3%	\$	8,446	\$ 293.05	/Acre
			Industrial	868	4.0%	\$	108,051	\$ 124.54	/Acre
			Other	2,016	5.8%	\$	155,019	\$ 76.91	/Acre
			Residential	-	76,304	39.7%	\$ 1,062,126	\$ 13.92	/DU
<b><u>CULTURE AND LEISURE</u></b>									
<b>Nature Center</b>									
<i>Operations less CIP</i>	\$ 524,761	Dwelling Units	Residential	76,304	100%	\$	524,761	\$ 6.88	/DU
<i>Bookstore</i>	\$ 48,072	Dwelling Units	Residential	76,304	100%	\$	48,072	\$ 0.63	/DU

Source: Economics Research Associates and the City of Chula Vista

## A-2

## Chula Vista - Functional (Indirect) Cost Factors

	Functional Costs	Allocation Variable	Land Uses	Acres	DUs	Population	Cost Allocation	Distributed Cost	Cost/Unit	Marginal Adjustment Factor <sup>1</sup>	Marginal Unit Cost/Unit
<b>Department</b>											
<b>LEGISLATIVE AND ADMINISTRATION</b>											
City Council	\$ 572,472	Population				220,036	100%	\$ 572,472	\$ 2.60	0.7179	\$ 1.87 /Person
City Clerk											
Operations	\$ 201,270	Population				220,036	100%	\$ 201,270	\$ 0.91	0.7179	\$ 0.66 /Person
Elections	\$ 18,495	Population				220,036	100%	\$ 18,495	\$ 0.08	0.7179	\$ 0.06 /Person
City Attorney											
Operations & Litigation	\$ 674,132	EDU Share (Private Land)	Retail	964			7.4%	\$ 50,082	\$ 51.96	0.7179	\$ 37.30 /Acre
			Office	214			1.8%	\$ 12,016	\$ 56.12	0.7179	\$ 40.28 /Acre
			Hotel	29			0.1%	\$ 957	\$ 33.21	0.7179	\$ 23.84 /Acre
			Industrial	868			1.8%	\$ 11,891	\$ 13.71	0.7179	\$ 9.84 /Acre
			Residential	9,376	76,304		88.9%	\$ 599,186	\$ 7.85	0.7179	\$ 5.64 /DU
Administration											
Administration	\$ 24,090	Population				220,036	100%	\$ 24,090	\$ 0.11	0.7179	\$ 0.08 /Person
Management and Information Services											
Operations	\$ 213,631	Population				220,036	100%	\$ 213,631	\$ 0.97	0.7179	\$ 0.70 /Person
GIS	\$ 50,942	Population				220,036	100%	\$ 50,942	\$ 0.23	0.7179	\$ 0.17 /Person
Disaster Preparedness	\$ 20,208	Population				220,036	100%	\$ 20,208	\$ 0.09	0.7179	\$ 0.07 /Person
Maintenance	\$ 123,920	Population				220,036	100%	\$ 123,920	\$ 0.56	0.7179	\$ 0.40 /Person
General Services	\$ 5,264,740	Population				220,036	100%	\$ 5,264,740	\$ 23.93	0.7179	\$ 17.18 /Person
<b>DEVELOPMENT AND MAINTENANCE SERVICES</b>											
Community Development											
Administration	\$ 225,130	Population				220,036	100%	\$ 225,130	\$ 1.02	0.8045	\$ 0.82 /Person
Economic Development	\$ -	Population				220,036	100%	\$ -	\$ -	0.8045	\$ - /Person
Environmental Services	\$ -	Population				220,036	100%	\$ -	\$ -	0.8045	\$ - /Person
Planning and Building Services											
General Administration	\$ 280,690	Population				220,036	100%	\$ 280,690	\$ 1.28	0.8045	\$ 1.03 /Person
Planning Services	\$ 80,421	Population				220,036	100%	\$ 80,421	\$ 0.37	0.8045	\$ 0.29 /Person
Building Services	\$ 94,758	Private Land by Use	Retail	964			8.4%	\$ 7,976	\$ 8.28	0.8045	\$ 6.66 /Acre
			Office	214			1.9%	\$ 1,772	\$ 8.28	0.8045	\$ 6.66 /Acre
			Hotel	29			0.3%	\$ 239	\$ 8.28	0.8045	\$ 6.66 /Acre
			Industrial	868			7.6%	\$ 7,180	\$ 8.28	0.8045	\$ 6.66 /Acre
			Residential	9,376	76,304		81.9%	\$ 77,592	\$ 1.02	0.8045	\$ 0.82 /DU
Police											
Administrative Services	\$ 4,964,348	Population				220,036	100%	\$ 4,964,348	\$ 22.56	0.2716	\$ 6.13 /Person
Fiscal Operations/ Research & Evaluation	\$ 857,908	Population				220,036	100%	\$ 857,908	\$ 3.90	0.2716	\$ 1.06 /Person
Fire											
HR Program	\$ 216,622	Population				220,036	100%	\$ 216,622	\$ 0.98	0.2716	\$ 0.27 /DU
Training	\$ 734,985	Population				220,036	100%	\$ 734,985	\$ 3.34	0.2716	\$ 0.91 /DU
<b>CULTURE AND LEISURE</b>											
Recreation											
Recreation Administration	\$ 795,082	Population				220,036	100%	\$ 795,082	\$ 3.61	0.7179	\$ 2.59 /Person
Parks and Rec Commission	\$ 1,083	Population				220,036	100%	\$ 1,083	\$ 0.00	0.7179	\$ 0.00 /Person
Library											
Library Administration	\$ 104,814	Population				220,036	100%	\$ 104,814	\$ 0.48	0.7179	\$ 0.34 /Person
Grants Development Services	\$ 143,962	Population				220,036	100%	\$ 143,962	\$ 0.65	0.7179	\$ 0.47 /Person
<b>NON-DEPARTMENTAL (Excluding Capital Improvements)</b>											
Operations	\$ -	Population				220,036	100%	\$ -	\$ -	0.7179	\$ - /Person

<sup>1</sup>Ratio of departmental staffing growth during a 3-year period to population growth during the same period. ERA has assumed

Citywide growth factors in departments that have added staff at a faster rate compare to population growth (due to departmental shifts)

<sup>2</sup>Publicly maintained parks only

Source: City of Chula Vista and Economics Research Associates